'Armed with power for preventing the spread of infectious disease': The making of the Public Health Act 1872 and its implementation in Auckland Province, 1870-1876

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Abstract

This dissertation examines the first piece of comprehensive public health legislation in New Zealand, the 1872 Public Health Act. Previous historians of New Zealand public health have downplayed the significance of the Act, and nineteenth century public health measures in general, suggesting the Act was poorly implemented by Health Boards who had little interest in their duties. This dissertation tests these claims by examining the implementation of the Act in Auckland Province, focusing on Auckland City and its suburbs, where most of the Local Boards of Health were. To fully understand this topic, a number of aspects of public health at the time and of the Act itself are investigated. Wider aspects of public health covered include health conditions in Auckland during the period, and how far they changed, and beliefs and ideas about public health that were held. This dissertation also discusses how the Act was formed in the context of such ideas and conditions, which aspects of it were actively pursued, which were neglected, and by whom, and how far there was a will to act that was limited by factors such as lack of funding, resources and knowledge. These subjects are examined through the use of a range of sources, including official government records, Board of Health records, statistics and newspapers, paying attention to both the substantive information that can be gained from such sources, as well as their discursive elements. This dissertation examines the different levels of power and responsibility set up by the section of the Act which created the Boards of Health, recognising that while there were not always tangible results, there was often an expressed will to act by public health authorities. This dissertation concludes that the Act was an important development in New Zealand's public health history, providing the first legislative expression of the 'sanitary idea' and setting up structures of responsibility that placed much more power to define sanitary conditions with public health authorities than hitherto existed, reducing the ability of individuals to do so and creating a 'new politics of health' that represented a new era.

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Introduction

On 24 April 1876 F.H. Heighway, a paid Health Inspector appointed under the Public Health Act of 1872, reported to the Auckland Central Board of Health the hazard to health presented by a horse carcass. The letter described it in vivid detail:

> The carcass had been flayed and opened and the entrails with the inside lay scattered so as to render it very foul, offensive and disagreeable to the senses.[1]

The area in which it was found was under the jurisdiction of the Local Board of Health for Newton District, so Heighway visited the Chairman of this body. As Heighway reports, the Chairman emphatically stated that 'so long as the nuisance did not annoy him he did not care'.[2]

This incident exemplifies the face of nineteenth century public health in New Zealand as presented by historians. Two major works of public health from two different eras, *Challenge for Health* by F.S. Maclean and *Safeguarding the Public Health* by Derek Dow, present essentially similar interpretations of this period of New Zealand's public health history. Dow argues that there was little commitment to public health in nineteenth century New Zealand; in 1874 the Auckland Provincial Council vetoed £600 for public health, but was 'willing to expend £800 on the inspection of sheep'.[3] Maclean's book, published twenty years earlier, presents a similar portrait of public health priorities, arguing that while in Otago there was some commitment to the 1872 Public Health Act, 'there was only a meagre response' from most local authorities, and '[f]ew ... approached their new responsibilities with any enthusiasm'.[4]

This dissertation re-examines such ideas by looking in detail at a specific aspect of nineteenth century public health in New Zealand: the implementation of the Public Health Act of 1872 in Auckland Province, in particular the activities of the Central and Local Boards of Health. The title of the dissertation is taken from debate in Parliament about the Act, when one Member argued that one of the key results of the Act be that 'local authorities should be armed with power for preventing the spread of infectious disease'.[5] This Act was New Zealand's first comprehensive Public Health Act, and to try and achieve this aim it set up a Central Board of Health for each Province, with Local Boards of Health reporting to the Central Boards. Other sections of the Act provided for quarantine and compulsory vaccination, but these are not the focus of this dissertation, since unlike the Boards

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1 F.H. Heighway to Central Board of Health, 24 April 1876, Auckland Province (AP) Series 10/3, Archives New Zealand Head Office, Wellington (ANZW).

2 F.H. Heighway to Central Board of Health, 24 April 1876, AP, 10/3, ANZW.

3 Derek Dow, *Safeguarding the Public Health: A History of the New Zealand Department of Health* (Wellington: Victoria University Press, 1995), p. 25.

4 F.S. Maclean, *Challenge for Health:A History of Public Health in New Zealand* (Wellington: Government Printer, 1964), p. 12.

5 *New Zealand Parliamentary Debates (NZPD)*, Vol. XII, 23 July 1872, p. 30 (Gisborne).

of Health, they were not entirely new and simply replaced existing separate legislation on such matters. The Act was replaced by another Public Health Act in 1876 with the abolition of provincial government. My central hypothesis is that Derek Dow's claim that '[t]he activities of the New Zealand boards [of health] between 1872 and 1876 were at best sporadic' is a generalisation that needs testing, and there was greater commitment to public health under the 1872 Public Health Act than historians such as Dow and Maclean indicate.[6] Specifically, this dissertation shows that the interpretations of Maclean and Dow are too simplistic, and do not account for differing levels of commitment from the various levels of responsibility established under the Act, which ranged from the financial duties of the Provincial Council down to the obligations of householders to report the appearance of infectious disease. Also neglected are the range of reasons for the lack of activity or results, and the fact that commitment to the Act did not only manifest itself in actions, but also in an expressed will to act that might have been frustrated.

Topics in the history of public health are of growing interest to historians internationally. Such studies have examined ideas about the nature of disease; the use of statistics as a measure of health conditions; and the relationship between discourses about health and state power. Dorothy Porter's comprehensive study, *Health, Civilisation and the State*, discusses many of these themes.[7] Works written in the 1950s and 1960s, such as those by George Rosen and C. Fraser Brockington, tend to focus on administrative change, and stress the idea that public health was 'invented in the nineteenth century' through the rise of 'the sanitary idea', although with antecedents in earlier developments such as Roman baths.[8] These works also see public health as a heroic crusade, presenting 'grand narratives of progress' based upon the idea that scientific advancement had abated and would continue to abate epidemic disease.[9] Porter's book presents a more modern interpretation, tracing public health history from the ancient world to today, but with very different underlying concepts. She defines public health as 'the history of collective action in relation to the health of populations', going beyond a narrow focus on legislative change, as well as taking into account more recent developments in historical thinking, such as poststructuralism.[10] In taking this approach, Porter focuses on the importance of power structures, stressing the 'political implications of population health in different periods and different societies'. In examining the nineteenth and twentieth centuries, she demonstrates the importance of the rise of the modern state to public health, studying 'the rights

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6 Dow, p. 25.

7 Dorothy Porter, *Health, Civilisation and the State: A History of Public Health from Ancient to Modern Times* (London: Routledge, 1999).

8 Dorothy Porter, p. 2. George Rosen, *A History of Public Health*, expanded edn, (Baltimore, Johns Hopkins University Press, 1993) and C. Fraser Brockington, *A Short History of Public Health* (London: J. & A. Churchill, 1966).

9 Dorothy Porter, p. 1.

10 Dorothy Porter, p. 4.

and obligations of citizens within the "social contract" of health between the state and civil society in modern democracies'.[11] The themes and ideas developed by Porter are important to any modern historical investigation of public health, including this dissertation. Like Porter's book, this dissertation recognises and acknowledges the problematic nature of the idea of 'progress', since while the 1872 Public Health Act did produce improvements, and was the first Act of its kind in New Zealand, it cannot be neatly placed within any kind of overall narrative of progress.[12] This dissertation also examines the discourses about public health in New Zealand during the period of study, looking at how the obligations of both government and citizens were discussed, and how they were often linked to ideas of civilisation and progress.

Porter's book is the most important modern account covering the full sweep of public health history, but other historians have explored similar themes in more narrowly focused studies. Anthony Wohl's book on public health in Victorian Britain focuses upon 'the connection between the physical and social environment and the human body'.[13] Wohl includes much descriptive information on topics such as infant mortality, the poor quality of food, and disposal of waste and pollution, but has a more limited focus on theoretical concepts and contemporary ideas and discourses. Wohl also examines the rise of state intervention in public health matters, spurred on by Edwin Chadwick's sanitary report. This report, one of the most significant developments in nineteenth century public health, was published in 1842 under the title *The Sanitary Conditions of the Labouring Classes of Great Britain*, and has provided fertile ground for historical investigation. It outlined Chadwick's concept of the 'sanitary idea', which would be influential throughout the nineteenth century, in Britain and also in New Zealand. Chadwick's 'sanitary idea' championed the creation of a central authority, with local boards of health reporting to it, and focused on sanitary regulation, including sewage control and water supply. Chadwick's ideas were founded upon the miasmatic theory of disease. This theory, which dominated both the medical and public consciousnesses throughout much of the 1800s, purported that 'diseases arose spontaneously from the miasma, or effluvia, or noxious gases emanated by accumulated organic matter', and that putrefying matter produced bad air, which in turn produced disease.[14]

Chadwick's ideas have provided much inspiration for research on public

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11 Dorothy Porter, p. 5.

12 Chapter XXII of Roy Porter, *The Greatest Benefit to Mankind: A Medical History of Humanity From Antiquity to the Present* (London: Fontana Press, 1999), pp. 710-18, discusses how despite undeniable advances in medical science, we still often find ourselves at the mercy of disease examples in the twentieth century including the influenza pandemic of 1918-19 and AIDS, and thus that the concept of 'progress' is problematic.

13 Anthony Wohl, *Endangered Lives: Public Health in Victorian Britain* (London: Dent, 1983), p. 2.

14 Wohl, p. 87.

health in the nineteenth century. Joseph W. Childers argues that Chadwick created a 'literary' poor, conforming to middle class ideas and associating disease with moral degradation.[15] Among other things, Michael Cullen argues in his book on the nineteenth century statistical movement that the promotion of Chadwick's ideas involved a rejection of the competing ideas of Edinburgh academic W.P. Alison, who promoted a public health model focused on economic factors rather than sanitarianism, and concentrated less on moral factors than Chadwick.[16] Michael Flinn has examined the issue of *laissez-faire* ideology in nineteenth century public health in his introduction to his edited version of Chadwick's sanitary report. He argues that it is simplistic to suggest that such an ideology held back public health - purely *laissez-faire* ideas were little accepted, there was no real consensus of opinion, and social policy saw much intervention.[17] In a wide-ranging work on public health in Britain in the first half of the nineteenth century, Christopher Hamlin stresses the importance of social factors in nineteenth-century understandings of disease, and discusses various aspects of discourses around health. In particular, Hamlin notes that liberty was often measured in terms of health, and that to accept an idea that both wealthy and poor had the same physiological needs, a 'moral universalism', was to address the issue of public health. Hamlin also discusses the tension between free market, *laissez-faire* ideas and the need to address public health issues, and discusses how Chadwick's sanitarianism eventually fought off other ideas such as those of W.P. Alison to become the dominant force in attempting to solve public health problems.[18] In an earlier article, he also makes the important point that nineteenth century public health developments saw a shift in power relationships between medical professionals and the sick, with more power to define health conditions placed with health professionals and administrators.[19]

Alison Bashford addresses a similar point, noting that with the advent of the 'sanitary idea', '[a] new politics of health was at work, organised and implemented though the interventions of a range of emerging local health practitioners', including sanitary inspectors and doctors.[20] The use of health statistics formed a part of this trend. Graham Mooney's account of how mortality statistics were used locally in

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15 Joseph W. Childers, 'Observation and Representation: Mr. Chadwick Writes the Poor', *Victorian Studies*, 37 (1994), pp. 405-432.

16 Michael J. Cullen, *The Statistical Movement in Early Victorian Britain: The Foundations of Empirical Social Research* (New York: Harvester Press, 1975).

17 Edwin Chadwick, *Report on the Sanitary Condition of the Labouring Population of Gt. Britain*, ed. by M.W. Flinn (Edinburgh: Edinburgh University Press, 1965).

18 Christopher Hamlin, *Public Health and Social Justice in the Age of Chadwick: Britain, 1800-1854* (Cambridge: Cambridge University Press, 1998).

19 Christopher Hamlin, 'Predisposing Causes and Public Health in Early Nineteenth Century Medical Thought', *Social History of Medicine*, 5 (1992), pp. 43-70.

20 Alison Bashford, *Purity and Pollution: Gender, Embodiment and Victorian Medicine* (Houndmills: Macmillan, 1998), p. 3.

England and Wales argues that they were a tool for local preventative medicine. Their rapid dissemination made health problems clear to both the public and medical practitioners, and helped to legitimise increased local intervention, but they were also criticised for distorting the picture of disease levels where there were large numbers of hospitals.[21] Boards of Health were also central to the 'new politics of health', and some historians have focused specifically on this topic. Peter J. Tyler summarises the development of such boards in Britain, the United States, Canada and Australia and New Zealand. In the case of New Zealand, he uncritically accepts Maclean's perspective that there was little commitment from Local Boards of Health.[22]

Such studies provide background to New Zealand's public health development, which drew on these British ideas, and indicate some of the themes this dissertation will examine in a New Zealand context.[23] The association of poor health with immorality was strongly present in Auckland, and disease and poor health were often associated with crime and irreligion. There was also a tension between *laissez-faire* ideas and promotion of the 'public good', evident in both political and popular discourses. In New Zealand, the 1872 Public Health Act signalled an important shift in power in defining disease from the public to authorities, which reflected the 'new politics of health' identified by Alison Bashford.

Definitions of 'public health', especially more recent ones such as those of Dorothy Porter, are the retrospective constructions of historians, and can place the label of 'public health' on activities that were not known by this term at the time. When studying the nineteenth century, a time when issues of public health were widely discussed and debated, it is necessary to provide a definition that

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21 Graham Mooney, 'Professionalization in Public Health and the Measurement of Sanitary Progress in Nineteenth-Century England and Wales', *Social History of Medicine*, 10 (1997), pp. 53-78.

22 Peter J. Tyler, 'Boards of Health: A Nineteenth Century Response to Epidemics' in *New Countries and Old Medicine: Proceedings of an International Conference on the History of Medicine and Health, Auckland, New Zealand, 1994*, ed. by Linda Bryder and Derek A. Dow (Auckland: Pyramid Press, 1995), pp. 25-31.

23 In addition to this literature on the British experience of public health in the nineteenth century, other works have looked at the importance of developments elsewhere, particularly the United States and Continental Europe. Ann F. La Berge has published two articles arguing that French public health reform was an important influence on British measures, 'The Early Nineteenth-Century French Public Health Movement: The Disciplinary Development and Institutionalization of Hygiène Publique', *Bulletin of the History of Medicine*, 58 (1984), pp. 363-379 and 'Edwin Chadwick and the French Connection', *Bulletin of the History of Medicine*, 62 (1988), pp. 23-41. Popular resistance to public health measures during outbreaks of cholera in Tuscany is discussed in Michael Stolberg, 'Public Health and Popular Resistance: Cholera in the Grand Duchy of Tuscany', *Bulletin of the History of Medicine*, 68 (1996), pp. 254-277. Fatalities were initially seen by many as deliberate poisoning of the poor, leading to a fear of doctors and hospitals, and often led to symptoms being hidden. The dissemination of information about 'sanitary science' to householders by health reformers in the United States is discussed in Nancy Tomes, 'The Private Side of Public Health: Sanitary Science, Domestic Hygiene and the Germ Theory, 1870-1900, *Bulletin of the History of Medicine*, 64 (1990), pp. 509-39.

encapsulates how public health was understood then. This is not a simple matter of 'toilets, drains and political statutes through the ages', as presented by public health histories from the mid twentieth century, but involves broader social and moral issues that were associated with 'the sanitary idea'.[24] These include ideas of class and social control, the ways that public health measures were seen as a means of controlling the lower classes, and the links made between poor health conditions and moral degradation, notable in Edwin Chadwick's sanitary report. The concept of public health was an aspect of the bureaucratisation of the state, including the tension between a desire among many for centralised control and pleas for local government autonomy, made clear in the implementation of compulsory measures such as vaccination. Public health was also understood in terms of ideas about the transmission of infectious disease, particularly the idea of 'miasma', and attempts to prevent such diseases through sanitary reform.[25] As this dissertation demonstrates, such ideas found close parallels in New Zealand.

The two major public health histories of New Zealand, by F.S. Maclean and Derek Dow, cover both the nineteenth and twentieth centuries, although Dow's book is a commissioned history of the Health Department, which was set up in 1900, and his material on the nineteenth century thus acts as a preface to his main story. Maclean takes an epidemiological approach, writing chapters on individual diseases such as influenza and diphtheria, as well as topics such as Maori health and quarantine. Dow takes a chronological approach, telling the story of public health in New Zealand as a series of important events and developments. However, this dissertation tests prevailing interpretations of nineteenth century public health inherent in the writings of Dow and Maclean, and suggests that they are too simplistic and generalised. Maclean argues that in the nineteenth century 'the administration of public health was either non-existent or was practised in a somewhat ineffective manner by the local authorities with little or no guidance from any higher authority.'[26] Although he conceded that the Central Board had some success, and indeed, goes as far to say that Auckland would perhaps have fared better if Provincial Central Boards had not been abolished in 1876, he describes the Local Boards as inactive and ineffective.[27] Dow recognises that there was 'widespread concern on the part of a wide cross-section of the public' about health in the nineteenth century, although like Maclean he suggests there was a lack of commitment at official levels.[28] Other New Zealand historians also present similar ideas. In her chapter for a world history of public health published in 1994, Linda Bryder suggests that the Public Health Act of 1872, and other nineteenth century

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24 Dorothy Porter, p. 1.

25 Mary Poovey, *Making a Social Body: British Cultural Formation 1830-1864* (Chicago: University of Chicago Press, 1995), p. 115.

26 Maclean, p. 11.

27 Maclean, p. 108.

28 Dow, p. 41.

legislation in New Zealand and Australia, resulted from 'shock diseases' such as smallpox, 'galvanising local communities into action'. Bryder goes further, however, suggesting that 'the shock effect did not last long beyond the crisis itself - leaving impressive legislation but little commitment to it'.[29] This dissertation shows that this idea is also problematic, arguing that there was deeper commitment to the Public Health Act quite apart from the 'shock effect' of the small pox outbreak in 1872 that played a role in the creation of the Act.

In addition to these works, there are a number of smaller, more specific studies, including theses. In her thesis discussing representations of 'dirt' in nineteenth century Dunedin, Pamela J. Wood explains that public health ideas were imported from Britain and adapted to local conditions, and that ideas of dirt were a contested part of health discourses, often defined by those with responsibility for health matters, including sanitary officers, who helped create a strong public image of dirt as a 'tale of horrors'. As she suggests, many settlers saw relocating to New Zealand as likely to improve their health, and as an opportunity 'to fashion a new urban frontier' which avoided the problems that had been a factor in their departure from their home countries.[30]

Christchurch's public health has been addressed by Geoffrey Rice, who focuses on the period from 1875 to 1910. He argues that 'miasmatic' diseases were widely taken for granted as 'the natural order of things', and he argues that declining death rates resulted from strong public health campaigning and the removal of cesspits that polluted wells.[31] Rice also discusses the 1872 Act, stating that in Christchurch it was poorly enforced. The Central Board of Health for Canterbury was unable to persuade the City Council to act as an adequate Local Board of Health, and unable to get medical practitioners or householders to report infectious disease, so it was effectively confined to quarantine measures.[32] Rice also contends that while New Zealand in the 1870s had generally lower death rates than Britain, and largely avoided some diseases such as cholera, it often fared worse with 'filth' diseases such as typhoid and diarrhoea, Christchurch faring worst of all New Zealand's cities.[33] Public health in Christchurch is also examined in the *New Zealand Historical Atlas*, with maps outlining the presence of disease

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[29] Linda Bryder, 'An New World? Two Hundred Years of Public Health in Australia and New Zealand', in *Clio Medica: The History of Public Health and the Modern State*, ed. by Dorothy Porter (Amsterdam: Editions Rodopi, 1994), p. 317 (pp. 313-34).

[30] Pamela J. Wood, 'Constructing Colonial Dirt: A Cultural History of Dirt in the Nineteenth Century Colonial Settlement of Dunedin, New Zealand' (Unpublished PhD Thesis, University of Otago, 1997), p. 41.

[31] Geoffrey W. Rice, 'Public Health in Christchurch 1875-1910: Mortality and Sanitation', in *A Healthy Country: Essays on the Social History of Medicine in New Zealand*, ed. by Linda Bryder (Wellington: Bridget Williams, 1991), pp. 85-108.

[32] Rice, pp. 94-95.

[33] Rice, p. 88.

and the location of water supplies and sewers from the 1860s to the 1910s.[34]

In comparison, Auckland's public health has been the subject of less specific research. No previous theses or dissertations have focused specifically on health in nineteenth century Auckland, but in her 'social portrait' of Auckland in the first half of the 1870s, Judith Elphick includes some discussion of public health matters, looking at issues such as sanitation, water supply and housing conditions.[35] Laurie Gluckman examines the records of the first 384 inquests in Auckland, providing background material on health conditions and the medical community in the nineteenth century colonial city during the period from 1840 to 1864.[36] He discusses which diseases existed, the state of housing, facilities such as water supply and sewers, as well as outlining the medical community at the time, and the hospitals and other facilities at which they worked.

The focus of most New Zealand studies has, however, been on the twentieth century. An important assumption behind this focus is that New Zealand had no real public health system until the passage of the Health Act in 1900 and the creation of the Health Department, an idea clearly stated by both Maclean and Dow. Indeed, nineteenth century public health in New Zealand is a curiously neglected area of historical investigation. For example, there is no major biography of one of the most significant individuals involved in public health in this period, Thomas Moore Philson. Philson was the Provincial Surgeon at the Auckland Provincial Hospital, and sat on the Central Board of Health for Auckland Province, so a detailed insight into his life, beliefs and career would illuminate any study of public health in Auckland in the nineteenth century. The role of individuals such as Philson adds another dimension to the study of the Public Health Act, and Philson's activities are discussed along with those of Health Inspector F.H. Heighway in this dissertation.

This dissertation draws upon past works for its inspiration, but aims to expand on aspects of New Zealand's public health history that have not been investigated in depth before. The aim is not, however, to simply fill a gap in the existing literature, since examining the 1872 Public Health Act in a localised context provides insight into wider aspects of colonial New Zealand. This study illustrates the importance of New Zealand's British heritage, and how, while this heritage influenced New Zealand society, ideas from Britain were adapted to the New Zealand context. This dissertation also highlights the colonists' tentative early attempts at public health administration, which while flawed and sometimes ineffective, showed that the colony was attempting to move towards becoming a more independent, more modern and more 'civilised' society. These efforts should

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[34] *New Zealand Historical Atlas*, ed. by Malcolm McKinnon (Auckland: Bateman, 1997), plate 85.

[35] Judith Elphick, 'Auckland: A Social Portrait, 1870-74' (Unpublished MA Thesis, University of Auckland, 1974).

[36] Laurie Gluckman, *Touching On Deaths: A Medical History of Early Auckland Based on the First 384 Inquests* (Auckland: Doppelganger, 2000).

not be dismissed as unimportant. The focus of this dissertation is the period from 1870, two years prior to the passage of the Act, to 1876, when it was replaced by a new Public Health Act. This facilitates discussion of ideas about public health in the years leading to the Act, which influenced its creation, as well as allowing discussion of health conditions prior to the Act. Nonetheless, with a deliberately narrowly focused period, change was on a relatively small scale.

The 1872 Act was administered on a provincial basis, reflecting the system of government in this period. This dissertation studies one province, Auckland, and within this province concentrates on the city of Auckland and its suburbs. At the time being studied, Auckland City was bounded by Stanley Street, Symonds Street, Karangahape Road, Ponsonby Road, and Franklin Road, making up an area of 623 acres. This is the area that was under the jurisdiction of the City Council acting as the Local Board of Health. Suburban areas such as Karangahape, Grafton, Arch Hill, Grey Lynn, Eden Terrace and Parnell would later become part of Auckland City, but at this time were administered separately by Highway Boards, which usually acted as Local Boards of Health for these locations.[37] In a small scale study such as this, it is necessary to focus the discussion as much as possible, and looking at more than one province would necessitate a larger project. Choosing Auckland and its suburbs concentrates upon the province's largest urban population centre, and most importantly the location of the majority of the local Health Boards.

A variety of sources have been used to investigate the formation and implementation of the Act in this period: reports in the *Appendices to the Journals of the House of Representatives*; debates about the Act and its implementation in parliament; discussion of public health matters and letters to the editor in the *New Zealand Herald* and the *Daily Southern Cross*; and the records of the Central Board of Health for Auckland Province, which include correspondence from Local Boards of Health, Health Inspectors, and private individuals. I have also used statistical information from two key sources. The annual runs of statistics published by the central government includes data on numbers of deaths from particular diseases within each province, as well as population data from which death rates can be derived. The *Auckland Provincial Government Gazette* provides statistical data on provincial government spending, including that on public health ventures. These sources have been used to gain both 'factual' information and to consider their more discursive aspects. For example, reports in the *New Zealand Herald* provide information about what public health conditions were like, but also how public health was discussed, what ideas existed about the topic, and what public health issues were seen as most important, particularly through editorials and letters to the editor. Statistical information also has strong discursive elements, and reflects ideas as well as figures: the way statistics were compiled and arranged illustrates how those who collected them understood the issues that they covered.

A number of key research questions arise from my hypothesis, beginning

[37] John Barr, *The City of Auckland New Zealand, 1840-1920*, 1985 Facsimile Edition (Auckland: Whitcombe and Tombes, 1922), p. 144.

with the state of public health conditions in Auckland during the period before the Act, from 1870 to 1872. This study also asks what ideas about public health were important during the period, and how ideas may have differed between the 'authoritative' and professional discourse used by medical authorities, and sometimes published in newspapers, and the beliefs of the general public. These ideas were important for setting the context within which the more practical aspects of the Act operated. Also discussed are the aspects of the Act which were actively pursued, which were neglected, and by whom. Also questioned is how far the implementation of the Act had an impact upon actual health conditions, and how far implementation of the Act was possibly a reaction to health conditions. But this is not the only way that commitment to the Act is examined, since the will to act is assessed, and it is considered why this desire to act may have been inhibited. In order to discuss such issues, however, the Act itself needs to be understood more fully, and how the Act was established and what influenced its creation are key considerations.

This dissertation is arranged in three chapters based around these questions. The first, entitled 'Public Health in Auckland, 1870-1872', provides a descriptive and analytical account of public health conditions in Auckland and its suburbs in the period just before the Act, 1870 to 1872, before examining the discourse surrounding disease and public health from 1870 to 1876, and how the health conditions described were understood by those who experienced them. Chapter Two, entitled 'The Creation of the Public Health Act 1872', studies the formation of the Act, arguing that it cannot be seen simply as an ill-considered reaction to an outbreak of small pox in New Zealand in 1872. Rather, a wider picture needs to be kept in view, recognising the prevailing beliefs about public health discussed in the first chapter, and the influence of ideas and Public Health Acts from other countries, especially Britain. This chapter then discusses the structures and procedures set up under the Act to deal with public health problems. The final chapter, entitled 'The Public Health Act in Action in Auckland, 1872-1876', studies how the Act was implemented in Auckland Province, discussing the various roles and activities of the provincial government, the Central and Local Boards of Health, and some of the key individuals charged with carrying out duties under the Act. It also discusses health conditions in Auckland after the Act was passed, assessing what changed, what remained the same, and how far implementation of the Act can account for such change or stability.

Chapter One: Public Health In Auckland, 1870-1872

In 1869, an Irishman in his mid-twenties named Arthur Winthrop Gubbins came to settle in New Zealand and farm with one of his five brothers. Before moving to the farm in Ohaupo, in the Waikato, he passed through Auckland, arriving there on a boat from Sydney. Upon his arrival on 19 September, Gubbins noted that 'loud were the praises of the Australians at the green grass and the beauties of the harbour'. Gubbins' own assessment of Auckland is similarly glowing:

> Evans [Gubbins' brother] was more struck with it than I thought he would be, and when we walked out to Mt. Eden, we both agreed that a great deal of pity was wasted on us by the fashionable world at home, for everything was so nice and green, more so than at home, and everyone looked so well and fresh, even Sydney people after a long time might look fresh here.[1]

The following year, the *New Zealand Herald* was telling a very different story. Far from everybody being 'well and fresh', there was 'scarcely a family but has been visited by sickness during the past two months'. This was seen as a result of official apathy allowing 'fœculent matter to stagnate and give forth its noxious gases in the very heart of the city'.[2] These contrasting accounts emphasise the importance of understanding the perceptions behind the sources that can elucidate public health conditions. Despite the problems New Zealand had in the nineteenth century, immigrants were often leaving conditions far more unhealthy and overcrowded than any it had.[3] As Pamela Wood suggests, many settlers saw New Zealand as a new opportunity, a means of escaping the problems of their home country.[4] Large numbers of young immigrants came to New Zealand as s result of this perception. For people who had lived in New Zealand cities for some time, perspectives were coloured by their day to day experiences. One correspondent to the *New Zealand Herald*, who lived on Auckland's main street, Queen Street, complained of the 'filthy stench' at the bottom of the road, which was 'simply horrible, pervading street, office, dining-room'. He argued that there had been little done to remedy the situation, and 'wished that official lungs had to inhale [the stench]' that he faced on a daily basis.[5]

This chapter first examines beliefs about disease in the period studied, especially the idea of 'miasma'. It then builds a picture of public health in Auckland from 1870 to 1872, the period immediately before the Act. Particular diseases were prevalent in Auckland at the time, and they were dealt with by medical practitioners

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1 Arthur Winthrop Gubbins, Diary, 8 September 1869 - 4 December 1870, NZMS 95, Auckland Public Library, p. 2.

2 *New Zealand Herald (NZH)*, 31 March 1870, p. 3.

3 For a discussion of the relationship between rapid urbanisation in Britain and the rise of epidemic disease, see Wohl, Chapter 5.

4 Wood, p. 41.

5 *NZH*, 21 March 1870, p. 5.

in a variety of ways. There were also various public health 'nuisances' such as open sewers and insanitary housing, some of which were addressed by the Auckland City Council prior to the passage of the Act. Changes in beliefs about disease after 1872 are discussed, followed by an interpretation of key concepts such as 'science', 'society', 'race' and 'religion'. These prevailing discourses about public health problems were linked with ideas about how nineteenth century society should operate, particularly what constituted a 'civilised' society, and this provides context vital to understanding how the Public Health Act of 1872 was implemented.

As in Britain, discussions about public health in New Zealand were characterised by a number of features, including class and morality, as well as more 'scientific' beliefs including the idea of miasmatic disease. The concept of 'miasma' was reflected in newspaper reports in Auckland, and was often used casually and without any explanation of its meaning, suggesting that the wider public were familiar with it. Indeed, correspondents to the *New Zealand Herald* would sometimes use the term 'miasma' when complaining of public health nuisances that intruded upon their life. In an item entitled 'The Main Sewer', the *Herald* noted simply that sickness had resulted from people 'being compelled to inhale the miasma' of the sewer.[6] The term was used just as freely on other occasions, such as a comment that threats to public health existed even in 'portions of the city elevated high above the miasma of the Queen-street sewer'.[7]

Newspapers also published overseas articles and reports on public health experiences in other countries. This was partly in order to make new ideas and research into public health matters available to a New Zealand audience, but also allowed New Zealanders to reflect on the perceived general superiority of local health conditions. To some extent, this reporting was seen as a public duty. Drawing attention to the experience of small pox in the United Kingdom, the *Herald* argued, would aid its control in New Zealand:

> With a greater amount of intelligence among the mass of the people, and greater enlightenment among the legislators, there can be no doubt whatever that sickness and mortality may both be reduced to a very great extent. Disease, in many of its aspects, is simply the result of carelessness and ignorance, of dirt and filth, contaminating the air we breathe, the water we drink, and a general neglect of the laws of nature and of that most wonderful machine, the human body.[8]

One of the reasons for presenting research and ideas about public health was in order to foster this 'greater amount of intelligence' among the populace. A typical example of this, reproduced from the *Birmingham Post* in April 1871, suggested that evidence from Birmingham Children's Hospital showed that the scarlet fever

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6 *NZH*, 30 September 1870, p. 2

7 *NZH*, 11 August 1871, p. 2.

8 *NZH*, 17 March 1871, p. 2.

was spread through the mixing of clothes in the laundry.[9] This practice of presenting information from abroad, especially from Britain, remained strong throughout the period under study. The threat of typhoid fever in 1875 led the *Herald* to publish 'some authoritative opinions on the subject of this most fatal illness' from recent British experiences.[10]

When studying the implementation of the 1872 Act, as well as examining beliefs such as the theory of miasma, it is necessary to examine how public health conditions were experienced in Auckland before the Act was passed. Different individuals had different experiences and beliefs about Auckland's conditions, and this is reflected in the sources. To some extent, this was an issue of class. As Judith Elphick suggests, the rich could afford 'the clean, fresh air, the spaciousness of the rural setting', and thus avoid the sanitary problems of city life.[11] The *Herald* saw this physical separation as leading to a lack of concern among elites for the public health problems of the day, an apathy that might be shaken by a disease such as typhoid, since it was believed it would 'certainly spread to those charming villa residences to which our commercial Nabobs retire after the business of the day'.[12]

As a colonial city, the mainly young migrants to Auckland brought with them their ideas and beliefs - and also their diseases. Infectious diseases such as influenza, small pox, measles and whooping cough were introduced to Auckland by European migrants, although they varied in severity.[13] Cholera, one of the deadliest diseases in Europe, was almost non-existent in Auckland. Much more prevalent were typhus and typhoid, dysentery and particularly diarrhoea, most frequent among children under five. Medical treatment for these diseases came from medical practitioners with a wide range of qualifications and backgrounds, reflecting Auckland's status as a colonial city. Some only briefly visited New Zealand, while others stayed longer and introduced medical practices such as the use of the stethoscope and vaccination.[14] Most received their medical education in the United Kingdom, bringing their ideas to the new colony. One of the most important medical figures was Thomas Moore Philson, who trained as a doctor in Edinburgh. Philson was Chief Surgeon at the Provincial Hospital, originally established in 1847 as the Colonial Hospital. Philson's casebook gives insight into the treatment of disease in the early 1870s. The way the outbreak of small pox in

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9 *NZH*, 24 April 1871, p. 3.

10 *NZH*, 25 January 1875, p.2. The publication of opinions and ideas about disease from overseas experience by the *Herald* occurred regularly during the 1870-76 period, other examples including the spread of typhoid through infected milk in Islington, from the *Medical Times and Gazette* on 17 March 1871, p. 3, a leading article on cholera epidemic in Europe, urging preventative measures on 4 August 1873, p. 2, and lengthy article from the *South Australian Register* on the 'rules of health' on 7 January 1876, Supplement p. 1.

11 Elphick, p. 102.

12 *NZH*, 2 December 1872, p. 2.

13 Gluckman, p. 21.

14 Gluckman, p. 75.

1872 was dealt with provides one example. Isolation was seen as vital to prevent the spread of disease; once the first case of small pox was ascertained, the patient was 'immediately removed to a detached house in the Hospital paddock'.[15] Little could be done to help the patient, and he died soon afterwards. Another case was monitored but proved to be 'very mild' and it 'ran its course'.[16] This focus on preventing the spread of the disease extended to Philson's treatment of prisoners at Mount Eden Gaol, where '[v]accination was diligently practised and no case [of small pox] occurred'.[17]

Prior to the Public Health Act, local government sometimes dealt with public health. Auckland City was governed by a City Board of Commissioners from 1863 to 1871, which then became the City Council. Auckland Province had a growing population at this time, rising from around 54,000 in 1870 to almost 67,000 in 1872. Auckland City was the largest urban centre, with a population of almost 13,000 in 1871. This constituted a rise of nearly 5000 since 1861, and the population would grow by another 3700 in the next ten years.[18] However, this was only the area under the jurisdiction of the Auckland City Council, which acted as a Local Board of Health; these population figures do not include the suburban areas, such as Parnell and Eden Terrace, which were covered by a number of other Local Boards. Auckland was still a relatively undeveloped city at this stage, and consequently facilities such as drainage, water supply and sewage were 'in an embarrassingly primitive state', but both the City Board and the City Council did make some attempt to improve sanitary conditions.[19] The City Board placed a high priority on public health, and aimed to improve sewage and water supply, but was hampered by the cost of such measures. The Board 'advanced only in fits and starts' in the field of public health. The City Council had more success in suppressing 'nuisances', inspecting commercial premises and putting proper drainage in place in inner city streets such as Cook Street and Wellesley Street in early 1872.[20] In 1871, the City Council appointed George Goldie as Inspector of Nuisances, a position which would become that of Sanitary Inspector with the passage of the 1872 Act.[21]

During this period, a number of public health 'nuisances' were typically discussed in newspaper editorials and letters. Open sewers, drains and cesspools were a major problem, especially the Ligar Canal. This was in the centre of

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15 Thomas Moore Philson, 'Auckland Provincial Hospital: Annual Return of Diseases treated during 1872', undated, Casebook 1865-1979, one volume (np). Philson Medical Library, Auckland.

16 Philson, 'Auckland Provincial Hospital'.

17 Philson, 'Annual Medical Return of Mount Eden Gaol', 21 March 1873.

18 Barr, p. 141.

19 G.W.A. Bush, *Decently and in Order: The Government of the City of Auckland 1840-1971* (Auckland: Collins, 1971), pp. 100-01.

20 Bush, p. 101.

21 Bush, p. 123.

Auckland, to the west of Queen Street, and was a straightened section of the Horotiu Stream which served as an open sewer and drain, running out into the sea.[22] The *Herald* rightly noted that it had 'been written about over and over again'.[23] The canal was certainly not the only nuisance of this type. '[A]ncient and disgusting cesspools' caused similar problems.[24] And while the central city faced highly insanitary conditions, the suburbs were deemed equally unhealthy; indeed, they were regarded as just as bad or even worse. The *Herald* doubted that 'any portion of Queen-street could compete in point of nastiness with many parts of Parnell, Symonds-street and Newton ... by the filthy accumulation of years, rendered almost uninhabitable'.[25] Insanitary housing conditions were also a problem, one which would persist throughout the active life of the Act, for example the 'wretched tumble down shanties' on the location of the old Supreme Court.[26]

In reading contemporary newspapers, there is a sense that there was often little change in sanitary and health conditions, and that the severity of some 'nuisances' and diseases was determined by forces beyond human control. The weather was often noted by the *Herald* as a key factor. Prior to the passage of the Act, the influence of the weather was well recognised, and the *Herald* could make a casual comment when discussing sanitary problems that '[t]he hot weather will soon be upon us' knowing that the implications of this were clear to readers.[27] This perception was certainly accurate, and a number of diseases, such as typhoid, were brought on by hot weather, even if people at the time did not understand exactly why. However, another potential problem was not so regularly discussed. Despite an increasing population in Auckland, and its potential to worsen public health problems, this fact was little referred to in the *Herald*, or in the records of the Central Board of Health once the Public Health Act was in operation. On occasion it was alluded to, as when the *Herald* noted that 'Auckland is a town of such recent growth that the ground is only just beginning to be saturated with drainage, but each year renders the place more foul'.[28]

Some improvement in health conditions is evident in this period even before the Act was implemented, although it did not necessarily conform to a pattern of linear progress. Two examples concern the Ligar Canal and levels of infant mortality. During 1870 and 1871, the canal was regularly reported as a major health hazard, often in highly emotive language. However, by early 1872, there was an apparent improvement: it was now 'perfectly free from foul deposits' and with 'no very perceptible odour', a result credited to the 'energy displayed' by George

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22 Gluckman, p. 23.

23 *NZH*, 16 March 1870, p. 2.

24 *NZH*, 1 April 1871, p. 2.

25 *NZH*, 11 August 1871, p. 2.

26 *NZH*, 16 March 1870, p.2.

27 *NZH*, 11 August 1871, p. 2.

28 *NZH*, 1 April 1871, p. 2.

Goldie, the new Inspector of Nuisances.[29] Such a reliance on the commitment of individuals, rather than effective systems to deal with problems in a consistent manner, would also be a feature of the operation of the Act. Infant mortality also declined during 1871, which the *Herald* attributed to the sanitary efforts of the City Council.[30] These improvements were, however, temporary: both problems became worse again during the period in which the Act was in operation.

Newspapers regularly raised the spectre of disease. In drawing attention to the gutter on Albert Street, 'a stagnant reeking pool of putridity', the *Herald* expressed a fear that typhus fever would soon break out.[31] The *Daily Southern Cross* also expressed such fears, suggesting on one occasion that the sewer outlet at the Queen Street wharf was 'a fever-nursery, which only requires the heat of the summer solar rays to produce malignant fevers and other kinds of fatal diseases'.[32] Disease outbreaks did not always result, and it is necessary to assess how often disease actually occurred, and which diseases were the most prevalent in the few years before the Act.

While disease was a regular occurrence, its effects were often minor in comparison with the levels of sickness that occurred in Britain and Europe at this time. Statistics can help to provide part of the picture. Before 1872, mortality figures organised by disease do not exist, but total mortality rates declined overall in Auckland Province between 1869 and 1871; there were 17 deaths per 1000 people in 1869, 14 in 1870, and 11 in 1871.There was an increase to 13 deaths per 1000 people in 1872, however. The contribution of 'miasmatic' diseases to overall death rates can be seen in the 1872 figures. Out of the 826 recorded deaths, 172 were from 'Miasmatic Diseases', with diarrhoea the most prevalent of these, accounted for mainly by infant deaths. By contrast, 'Local Diseases', which included diseases of the nervous system, respiratory diseases such as bronchitis, heart disease and skin diseases, accounted for 273 deaths.[33]

Thomas Philson's casebook for the Auckland Provincial Hospital also suggests that disease levels from sanitary problems were minor. As he noted in May 1872, '[t]here has been no epidemic disease during the year', with no fatal typhoid fever cases.[34] His report on the hospital during 1872 presented a similar picture in discussing the small pox outbreak, '[t]he most important incident in the Report for 1872', and described a small number of cases in detail, rather than a major epidemic. He noted no other significant disease outbreaks.[35] Indeed, the effects of the small pox outbreak of 1872, one of the factors stimulating the creation

29 *NZH*, 16 March 1872, p. 2.

30 *NZH*, 13 September 1872, p. 2.

31 *NZH*, 11 October 1870, p. 2.

32 *Daily Southern Cross (DSC)*, 24 July 1872, p. 2.

33 *Statistics of New Zealand*, 1872.

34 Philson, 'Remarks and Observations', May 1872.

35 Philson, 'Auckland Provincial Hospital'.

of the Public Health Act, were small. To some degree, this was a result of the successful operation of quarantine regulations. The *Herald* suggested that 'no efforts are being spared by the authorities to render Auckland safe from small-pox contagion'.[36] Reports in the newspapers were generally of individual cases of the disease only, not of widespread infection.[37] In all, a total of only three fatal cases occurred in Auckland Province in 1872.[38] Indeed, the *Herald* expressed a belief that the alarm created by the outbreak was 'utterly unwarranted', and that diseases such as typhus, 'never nonexistent in the large cities of Europe', were worse.[39] Nevertheless, the *Herald* saw the fear created by the disease as beneficial because it caused 'a general movement in favour of vaccination'.[40]

Ideas about public health were not static, like health conditions themselves, and similarly did not change in a consistent, linear manner. There were important changes in the ways the spread of disease was understood during this period, although with limited discernible impact upon public health practices. For example, the concept of 'miasma' started to be challenged. In 1873 it was reported that 'recent scientific research' had proven the germ theory: 'germs of epidemic disease are carried through the air we breathe and the water we drink'.[41] Later, it was defined in another way: 'living organisms float in the air, and under favourable conditions develope [*sic*] the maladies of which they are the germs'.[42] Ideas about dirt were also occasionally challenged. The *Herald* noted that many people lived their lives in dirty conditions 'without having scarcely known a day's sickness', and often lived the longest, although without linking this observation to the idea of immunity.[43] Moreover, conflicting ideas about disease often coexisted, as suggested by an item on typhoid fever from 1875. It noted that some believed the disease 'to be generated by bad drainage, open cesspools, deficient ventilation and uncleanliness of living', while others saw it as spread by contagion. The writer argued that, since neither idea was fully proven, it was best 'to follow out the sanitary recommendations of the one and the precautions against contagion of the other'.[44] However, old ideas certainly did not die out, and there was the occasional throwback, such as a reference in early 1876 to the 'death-dealing miasma' from the

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36 *NZH*, 15 March 1872, p. 2.

37 An example was the case of George Seymour, reported in the *Herald* of 4 July 1872, p. 2. The following day it was reported that he was recovering, 'the small-pox in his case having assumed a very mild type'. (*NZH*, 5 July 1872, p. 2.)

38 *Statistics of New Zealand*, 1872.

39 *NZH*, 8 July 1872, p. 2.

40 *NZH*, 5 July 1872, p. 2.

41 *NZH*, 20 January 1973, p. 2.

42 *NZH*, 5 May 1873, p. 2.

43 *NZH*, 6 February 1875, p. 2.

44 *NZH*, 10 February 1875, p. 2.

'great fetid pool known as the intake'.[45]

Such changes had limited influence on public health practice and official policy during the period under study. The collection of statistics of disease illustrates the time lag that could occur. Typhoid and typhus are distinct and separate diseases, a fact well established by early 1872. An item from the London *Times* reprinted in the *Daily Southern Cross* noted that they were 'varying in their origin, course, and the morbid changes which they induce in the body'.[46] However, they were not separated in mortality statistics in New Zealand until the figures for 1873, and even after the figures for each disease were printed separately, they were placed in the same category.[47] The concept of miasma also persisted unchanged throughout the period in official statistics; 'Order I' of disease classification was 'Miasmatic Diseases', which included small pox, cholera and dysentery. Those charged with implementing the Public Health Act also clung to what they knew. By 1874, the *Herald* had published several discussions of the 'germ theory' of disease. In that year Health Officer William Stockwell wrote of the prevention of typhoid fever and other diseases 'of a miasmatic nature', using the traditional interpretation of miasma as resulting from decayed animal and vegetable matter.[48]

There were nevertheless often important differences between the dominant, scientific and professional discourses apparent in newspapers and in sources generated by the government and by health boards, and the ideas held by members of the public. Frequently, this reflected a greater fearfulness of disease and the threat of disease among the populace. For example there was concern that 'sewer gases' could even penetrate cast iron pipes and adversely affect people's health since '[t]hese gases have great penetrating power'.[49] Public concern was also raised over the issue of vaccination. While both the *Herald* and the *Daily Southern Cross* strongly supported vaccination, the members of the wider public often did not. One correspondent to the *Herald*, a supporter of vaccination, noted that fears had been raised by many that vaccination was not a 'certain preventative' against small pox, and that vaccination in fact caused disease among some children. The writer called these beliefs the views of 'eccentrics' and suggested that the idea that vaccination was an interference with individual liberty was 'a mere pretence...[since] [w]e are surrounded by such laws, where the general good is concerned'.[50]

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45 *NZH*, 30 March 1876, p. 2.

46 *DSC*, 1 April 1872, p. 2.

47 From 1873, typhus was listed as 8a under the order 'Miasmatic Diseases', typhoid was 8b, and 8c was 'Simple Continued Fever'. In 1872, the first year disease mortality figures were listed, they were counted together.

48 *NZH*, 26 March 1874, p. 3.

49 *NZH*, 31 May 1876, p. 3. The editor of the *New Zealand Herald* provided a brief response to this letter, stating that '[w]e think that our correspondent is worrying himself unnecessarily'.

50 *NZH*, 10 March 1870, p. 5.

Of course, discourses about public health was not limited to 'scientific' ideas such as the nature of disease. In addition, language was used in a manner which linked public health matters with other aspects of society, especially in newspapers. One of the major concepts of the time was that of progress and civilisation, linking improvements in public health with perceptions of what constituted a 'civilised' society. This was certainly not unique to New Zealand, and was part of the legacy of its largely British heritage. As Anthony Wohl notes, it was widely believed that 'physical well-being and a pure environment were the essential foundations for all other areas of social progress'.[51] A *New Zealand Herald* leading article in 1871 summed up something of the mood of the age:

> Progress is now the order of the day, the watchword of the generation in which we live. Advancement in education, in arts, in manufactures must be striven after by every country which does not desire to be found in the rear rank in the race for civilisation. It is those nations who are found foremost in the van who will form the nucleus around which will gather the great universal republic.[52]

None of this was perceived as possible without improved public health conditions. The concept of 'civilisation' and being 'civilised' was widely invoked, especially in the years leading immediately up to the passage of the 1872 Act. A leading article of March 1870, primarily discussing the Queen Street sewer, suggested that cesspits resulting from the sewer 'ought themselves to have no existence in a civilised community'.[53] On another occasion, it was contended that Auckland was behind 'most civilised communities' which prioritised public health; Auckland was merely 'pretending to some degree of civilisation'.[54] Progress and better public health conditions went hand in hand; improved sanitation was both a stimulus to progress and a result of it. For example, an item on 'earth closets' as a means of preventing 'annoyance by foul airs' suggested that drainage of the city would improve '[i]n the course of years, as we progress'.[55]

The promotion of an increasingly 'civilised' society through public health reform was portrayed as a war on dirt and disease. And, as with any war, the enemy was demonised in order to make the fight seem worthy and right. Words such as 'evil' and 'abomination' were freely and frequently used in descriptions of sanitary problems. A description of the Ligar Canal provides a particularly strong example:

> That abomination, the Ligar Canal, has been written about over and over again, but it is still a pestiferous ditch, the receptacle of every unimaginable filth, bubbling in the noon day sun, and for every hour of the day and night sending out poisonous gases to mingle with the air with breathe. And why is this filthy

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[51] Wohl, pp. 6-7.

[52] *NZH*, 2 May 1871, p. 2.

[53] *NZH*, 31 March 1870, p. 3.

[54] *NZH*, 17 February 1871, p. 2.

[55] *NZH*, 1 April 1871, p. 2.

> nuisance permitted to exist - an open, dirty, evil-smelling sewer, in the very heart of the city, with a City Board to look after such matters?[56]

Descriptions of public health problems were not always couched in such strong language. Similar, albeit less emotive, reports were common, such as the *Daily Southern Cross*'s description of the Ligar Canal as a 'frightful nuisance' with an 'abominable stench'.[57] Members of the public also used similar language. One correspondent to the *Herald*, writing about problems of polluted air, asked '[i]s the health of the community to be sacrificed to this pestilential demon?'.[58] Another writer complained of the 'pestiferous and ... death-dealing sewer' in central Auckland, urging official action and calling it 'a disgrace to any community that apes to be civilised'.[59]

Figures as well as language were used to measure and describe health conditions, and statistics were an important way in which health levels and progress were measured. The way they in which they were used tells us much about beliefs about public health in the 1870s. Figures were sometimes taken as a definitive measure of public health levels, overlooking any problems that might be inherent in their compilation; for example, consider contemporary readings of infant mortality statistics. The *Herald* had commented on the high levels of infant mortality on several occasions before September 1872. When it published figures at this time that indicated there was a decline, rather than discussing why the trend was occurring, it was observed that '[c]omment on the above [statistics] is needless'.[60]

While ideas about promoting cleanliness and 'civilisation' represent a dominant perspective, many among the general public did not necessarily share the same ideas. Middle class commentators often despaired at what they perceived as a lack of attention to sanitary measures among the working classes. As one such commentator in the *Herald* opined in 1870:

> The earth-closet system has been frequently advocated in these columns as the means of escape from the dirt and foulness which pollutes the atmosphere, and by soakage poisons half the drinking water used in Auckland, yet that the earth-closet system has not displaced the old receptacles is due entirely to the fact that in carrying out it more attention is required than the public generally will bestow. It seems, indeed, as if, to the majority of people, dirt and filth were not the abomination they should be to a civilised people, and that cleanliness like education must be made compulsory to be generally enjoyed.[61]

Such beliefs were certainly not unique to New Zealand in the nineteenth century. As Anthony Wohl suggests, while in Britain middle class reformers tried to affect

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56 *NZH*, 16 March 1870, p. 3.

57 *DSC*, 10 March 1870, p. 3.

58 *NZH*, 21 March 1870, p. 5.

59 *DSC*, 15 July 1872, p. 3.

60 *NZH*, 13 September 1872, p. 2.

61 *NZH*, 31 March 1870, p. 3.

change in sanitary conditions, and often associated improved public health with similar ideas of 'civilisation' to those that became preeminent in New Zealand, '[d]omestic filth was an accepted and unremarkable part of the lives of the majority of Victorians for much of the century'.[62]

This concept of improved public health as a key tenet of 'civilised' society was linked to a number of other beliefs in nineteenth century New Zealand, including race. Perhaps inevitably, racist beliefs manifested themselves, since Europeans saw themselves as superior and saw the Maori as a 'dying race'.[63] One correspondent to the *Herald* complained of the alleged 'overpowering odour' from a number of Maori houses at Mechanics' Bay, suggesting that for inhabitants of Parnell 'the essence of Maori is altogether too much for their sensitive nerves and weak stomachs'.[64] Such a use of language suggested that the writer believed Maori to be inherently inferior to Europeans and naturally unhealthy. Public health reform in this period was seen in exclusively European terms, a result of the belief in the superiority of European 'civilisation' over Maori society.

Religion and moral ideas were also linked to issues of public health. The healthy citizen was not just civilised, but law-abiding, moral and pious. Those living in insanitary housing were often seen as degenerates and criminals. In presenting a report on housing conditions from the Inspector of Nuisances, a *Herald* commentator argued that '[i]f we desire to find out the haunts of crime we have only to look to such places as we have described to find them'.[65] Sometimes the perceived nature of the inhabitants of such dwellings was described in moral terms. In one case they were noted as 'prostitutes and loafers of the worst character'.[66] Public health was also viewed to some extent as a religious or moral crusade. There was a belief that 'to disobey the law of health is to disobey the Maker' and that 'the laws of health ... are of Divine institution'.[67] These ideas were a legacy of religious thinking stretching back many centuries. In the nineteenth century such beliefs often appeared in journals such as the *Edinburgh Review*, which published an article in 1849 entitled 'Sanitary Reform' that called unhealthy

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62 Wohl, p. 86.

63 The idea that Maori were viewed as a 'dying race' has been discussed at length by New Zealand historians. Contemporary perspectives are outlined in James Belich, *Making Peoples: A History of the New Zealanders from Polynesian Settlement to the End of the Nineteenth Century* (Auckland: Allen Lane, 1996), pp. 173-75. He notes that this view persisted among Pakeha until around 1930. It was explained in both religious ways, such as 'the will of God' or 'the work of the Devil', and in a secular manner, including the impact of disease and 'the misuse of new foods, clothing and customs'.

64 *NZH*, 24 May 1872, p. 3. The editor of the *New Zealand Herald* agreed with the correspondent that '[t]he nuisance referred to is quite intolerable'.

65 *NZH*, 2 September 1874, p. 2.

66 *NZH*, 2 October 1874, p. 2.

67 *NZH*, 25 July 1874, Supplement, p. 1; *NZH*, 25 January 1876, Supplement, p. 1.

areas 'the great nurseries and fortresses of crime'.[68]

There was also a tension between individual responsibility and *laissez-faire* on one hand, and the wider public good on the other. This was a common theme in nineteenth century thinking, and one with important implications for the implementation of the Act. This tension was also strongly present in nineteenth century Britain, and as Christopher Hamlin notes, there was a desire to find a middle ground, since '[t]o let the market swing free was to tolerate damage to health; [but] to follow the lead of traditional medicine was to interfere regularly and profoundly in the market'.[69] Like other discourses around public health at the time, these ideas were not totally discrete, and were linked with ideas about the nature of a civilised society. For some, *laissez-faire* was seen as a mark of 'a savage state', while in 'a civilised community', individuals had to limit the amount of licence they exercised 'for the public good'.[70] Occasionally, this belief became somewhat extreme in its characterisation of those who did not submit to certain ideas about promoting 'public good', exemplified by this extract from a letter reprinted from the *Weekly Despatch*:

> Now Sir, in the face of these facts, and of the spread of this terrible disease [small pox], am I not justified in denouncing every man who neglects to have his children vaccinated as an enemy of the Commonwealth, deliberately running the risk of deeply injuring his neighbours by lending himself to the spread of a disease which he might otherwise assist in stamping out?[71]

There was often a desire to limit restrictions on individual freedom, especially in the area of business. The *Herald* argued that in the case of smoke pollution from factories, '[w]e should be sorry to throw obstacles in the way of private enterprise, but we must not forget the public interests'.[72] Such a tension between freedom and the public good persisted throughout the period, influencing the way the Public Health Act operated. For example, doctors often refused to report infectious diseases, as required by the Act, since they saw it as a private matter between them and their patients, and a breach of professional etiquette. Taking an opposite view, the *Herald* suggested that 'where the public health is concerned this professional etiquette would be more honored in the breach than in the observance'.[73]

Auckland in the first few years of the 1870s was still an unsophisticated pioneer settlement, limited in facilities such as sewers and drainage. Prior to the Act, the City Board and then the City Council tried to deal with public health

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68 'Sanitary Reform', *Edinburgh Review*, 37 (1849), in Gregg International Publishers, *Victorian Social Conscience - Public Health in the Victorian Age*, 2 Vols (Westmead: Gregg International Publishers, 1973), p. 217.

69 Hamlin, 'Predisposing Causes', p. 74.

70 *NZH*, 16 February 1870, p. 3.

71 *NZH*, 13 April, p.3.

72 *NZH*, 1 January 1872, p. 2.

73 *NZH*, 12 July 1875, p. 2.

matters, with some limited success. Introduced diseases were present, and were treated by medical practitioners such as the Provincial Surgeon Thomas Philson, but in many cases, such as smallpox, were not as severe as the disease outbreaks in Britain and Europe. Disease and public health matters were prominent in everyday life in this period, and they were understood in a variety of ways, linked to issues such as morality, race, religion and *laissez-faire* ideas. Improved public health was widely seen as a vital step on the path to becoming 'civilised'. Chapter Two examines the Act itself more closely, discussing its formation in light of both the existence of disease and the context of ideas about public health discussed in this chapter, including the influence of Public Health Acts elsewhere. It also discusses the administrative structures and responsibilities set up under the 1872 Act, as further background to the Act's implementation in Auckland Province, the focus of Chapter Three.

Chapter Two: The Creation of the Public Health Act 1872

On 23 July 1872, during the second reading of the Public Health Bill, English-born William Gisborne, the Colonial Secretary and member of the House of Representatives for Egmont, tried to explain the reasons for and functions of the proposed Bill:

> Existing circumstances, no doubt, gave a special significance to the Bill; but it was not a panic-stricken measure - it was carefully and deliberately founded on the precedent of modern legislation in England and other places, with such slight modifications as might render it applicable to the special circumstances of the Colony.... The object of the measure was - first, to prevent the approach of disease from foreign seas; secondly, to suppress it when it occurred; and, thirdly, to provide for vaccination.[1]

These comments encapsulate a number of the important ideas that influenced the creation of the Act. While he acknowledged the influence of the '[e]xisting circumstances' of the smallpox outbreak, Gisborne also recognised the importance of ideas from overseas, particularly from Britain, which influenced both legislation and broader public discourse about public health. However, ideas taken from elsewhere were not implemented without modification. As Linda Bryder notes, '[w]hile Britain may have provided the models, these were transformed in the colonial context'.[2] Gisborne's reasoning also illustrates the emphasis on the prevention of infectious disease that was the focus of public health reform, to be achieved through quarantine, vaccination, and new sanitary regulations.

This chapter discusses the making of the Public Health Act of 1872, outlines what it aimed to achieve, and describes the administrative structures that it put in place. The formation of the Act is discussed through the debates in Parliament, and also with reference to the prevailing ideas about public health outlined in the first chapter. Although smallpox sparked government action, prevailing ideas gave the Act its character and purpose. It was very much a product of beliefs and ideas circulating in New Zealand in the 1870s. The two sections of the Act covering quarantine and vaccination are outlined briefly. The first major section, setting up the health boards, is discussed in detail, examining the structure of responsibility created by the Act, identifying and describing the various officials and health boards established, and outlining the responsibilities of individuals such as householders and medical practitioners. This section was the major innovation of the Act, quarantine and vaccination having been provided for by previous Acts. It reflected a move towards a greater amount of sanitary inspection, and greater power being placed with sanitary authorities, a trend reflected both in the provisions of the Act and the language in which these provisions were expressed.

During 1872 there was an outbreak of smallpox in New Zealand, which has

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[1] *NZPD*, Vol. XII, 23 July 1872, p. 25 (Gisborne). The '[e]xisting circumstances' presumably refer to the appearance of smallpox in New Zealand.

[2] Bryder, p. 315.

widely been perceived by historians as the major reason for the passage of the Public Health Act. Maclean suggests only two reasons for the passing of the Act: a response to increasing population, or 'the result of a small outbreak of smallpox about that time'.[3] Dow notes that the passage of the Act coincided with 'isolated cases of smallpox'. He argues that while the suggestion that the Act was a panic measure in response to smallpox was widely rejected in Parliament, around one third of the Act's clauses covered quarantine, and about one quarter addressed vaccination.[4] The smallpox outbreak had an undeniable influence upon the passage of the Act, but public health matters were certainly not new to New Zealand's legislators. Vaccination and quarantine had both been legislated for a number of times before 1872. In addition, this was not the first time broad-based public health legislation had come before the House of Representatives. A Public Health Bill had been introduced in 1869 but failed to be passed into law, and in October 1871, before the smallpox outbreak, there was already renewed talk of public health legislation.[5] Rather than 'causing' the Act, the smallpox outbreak facilitated the successful implementation at that time of public health measures that had already been discussed for a number of years.

The Act was thus a result of both a perceived immediate crisis and ideas about public health predominant in New Zealand society at the time. Many of these ideas were drawn from international experience with public health legislation. Debate over the Public Health Bill in Parliament revealed a number of explicit references to overseas precedent, although Members of the House of Representatives (MHRs) were sometimes vague about the precise origin of their ideas. In moving the second reading of the Bill, William Gisborne proposed a clause, which was adopted, requiring householders to report infectious disease to the Local Board of Health, noting that '[t]here was a clause in some other Act, either an English Act or a Canadian Act', which legislated for the same thing.[6] Such uncertainty seems to bear out the claim that '[h]e was not an incisive debater either in the intimate atmosphere of the Legislative Council or in the ill-tempered and boisterous House of Representatives'.[7] Gisborne was more certain in his comments on smallpox and vaccination, presenting several specific examples, including a report from the medical officer of Liverpool and an item from the *British Medical Journal* which argued that vaccination was safe. He concluded that the examples 'showed conclusively that vaccination was almost a protection from small-pox, or, at all events, a protection of the highest degree against its pernicious and destructive

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[3] Maclean, p. 12.

[4] Dow, p. 23.

[5] *NZPD*, Vol. XI, 17 October 1871, p. 356 (O'Neill).

[6] *NZPD*, Vol. XII, 23 July 1872, p. 25 (Gisborne). This measure was adopted as clause 18 of the Public Health Act 1872.

[7] *Dictionary of New Zealand Biography, Volume Two 1870-1900*, ed. by Claudia Orange, (Wellington: Bridget Williams Books, 1993), p. 171.

effects'.[8] International examples were also referred to by MHRs who argued that the Bill was not an ill-considered reaction to the appearance of smallpox. One member maintained that the Parliament was

> not acting in a panic, but it was not in human nature not to wish to take precautions; and they knew that the same efforts to check the disease [smallpox] had been made in Victoria and New South Wales, to which colonies it appears to have spread from New Zealand.[9]

British legislative models in particular were taken as the most suitable. Dr. Buchanan made a typical comment in the Legislative Council that he 'understood that the Bill in that respect [vaccination] had been compiled from the English Act, only modified to meet the special requirements of New Zealand'.[10]

Comparison with Britain elucidates Linda Bryder's argument that New Zealand transformed British models in the colonial context. The first British Public Health Act of 1848 created one central authority, the General Board of Health, and Local Boards of Health with similar responsibilities to those given later to the New Zealand Boards. These responsibilities included regulating local 'nuisances' (defined under the Nuisance Acts passed between 1846 and 1848), monitoring drainage, declaring dwellings unfit for habitation, and the like. New Zealand adopted a similar model, but while there was much debate over the merits of centralisation in Britain, eventually leading to the resignation of the General Board in 1854, in New Zealand provincial autonomy was an important issue from the beginning. This was reflected in the structure of a Central Board of Health for each province, with Local Boards reporting to them. The more severe sanitary problems in Britain also resulted in other measures being adopted there which were not pursued in New Zealand, such as the compulsory formation of a Local Board of Health in any locality with a death rate of more than 23 per thousand.[11] There were still serious public health problems in New Zealand, nonetheless, and reluctance to include compulsory provisions may also be attributable to the tendency, identified by Linda Bryder, for countries such as New Zealand and Australia to be portrayed by governments as 'working man's paradises', which denied the extent of health problems.[12] Later Acts also illustrate how New Zealand took inspiration from British experience. For example, the Sanitary Act of 1866 gave local authorities a variety of new powers in public health matters, including regulating the housing of the poor. However, it also gave the central government power to coerce, and to

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8 *NZPD*, Vol. XII, 23 July 1872, p. 27 (Gisborne).

9 *NZPD*, Vol. XII, 26 July 1872, p. 137 (Fitzherbert). Similar reasoning had been used by William Gisborne earlier in this same session of Parliament (Vol. XII, 26 July 1872, p. 136), where he commented that the proposed Bill 'was not the result of any panic, but was a carefully considered measure, founded upon modern precedent and upon English legislation on the subject'.

10 *NZPD*, Vol. XII, 13 August 1872, p. 442 (Buchanan).

11 Dorothy Porter, p. 119.

12 Bryder, pp. 316-17.

determine faults by, local authorities.[13] A similar division of power was present in New Zealand's 1872 Public Health Act. The Central Boards were able to order the Local Boards to carry out various tasks during a public health emergency, and able to take over the powers of a Local Board for six months if it believed it was not carrying out its responsibilities in a proper manner.

Beliefs about health and disease also strongly influenced the Act, informing the way it dealt with the spread of disease and the means of preventing it. Although there was a relatively limited understanding of the way in which infection arose and how it spread, there was a strong belief in the practice of isolating infected individuals as a way of preventing epidemics. William Gisborne's perspective was typical. He argued that '[a] single infected individual might be the cause of spreading the disease, and might destroy the health and endanger the lives of the whole community.[14]

Related to this belief was the strong conviction among many MHRs that compulsory vaccination was an effective measure against the spread of smallpox. While this was a well-founded and accurate belief, in other cases MHRs displayed a lack of concrete knowledge about the spread of disease. This was was reflected in the debate over the inclusion of a clause allowing the seizure of 'unwholesome' food and drink.[15] For example, William Fitzherbert, Member for Hutt, argued that 'a very considerable amount of disease had been produced not by mere drinking to excess of strong drinks, but of what he might appropriately term "poisoned drinks"'.[16] No explanation was given as to exactly how these 'poisoned drinks' resulted in disease, what diseases they were believed to cause, or whether they allegedly caused infectious disease.

The final Act strongly reflected ideas about the spread of disease. Although the term 'miasma' did not appear during the Parliamentary debate on the Bill, and was not used in the resulting Act, the way the Act dealt with disease clearly was a manifestation of such ideas. The idea that disease could spontaneously emerge from the 'miasma' of decaying animal or vegetable matter is reflected in the responsibilities assigned to the Local Boards of Health, which included keeping drains and sewers covered and regulating businesses such as abbattoirs.

Broader ideas in New Zealand society at the time, not specifically related to public health, also influenced the shaping of the Act. While Bryder suggests that attempts at public health reform were hindered by *laissez-faire* ideology, 'a strong belief in individualism and the virtues of self reliance among the nineteenth-century colonists which kept social intervention to a minimum', both public discourses, as illustrated in the first chapter, and the debate over the Public Health Bill reveal a

13 Elizabeth Fee and Dorothy Porter, 'Public health, preventative medicine and professionalization: England and America in the nineteenth century', in *Medicine in Society: Historical Essays*, ed. by Andrew Wear (Cambridge: Cambridge University Press, 1992), p. 263.

14 *NZPD*, Vol. XII, 23 July 1872, p. 25 (Gisborne).

15 Such a measure was included as clause 37 of the Public Health Act 1872.

16 *NZPD*, Vol. XII, 23 July 1872, p. 29 (Fitzherbert).

tension between individualism and the good of society as a whole.[17] The Act included elements of both the idea of working for a broad 'public good' and more *laissez-faire* ideas of avoiding centralised control. The idea of 'public good' was reflected in a number of ways, including the responsibility placed upon householders and medical practitioners to report the existence of infectious disease, and such provisions clearly stemmed from the concerns expressed by a number of Members of the House of Representatives that the health of the community as a whole had to be prioritised over individual liberty in some situations. In some cases, parliamentarians specifically addressed ideas preeminent in nineteenth century thinking, especially in Britain. For example, while not actually specifically naming Jeremy Bentham's concept of utilitarianism, William Gisborne provided an almost exact definition of it in arguing for the necessity of a Public Health Act:

> In these days, the general object of political ambition was, not the predominance of a party or sect, but a desire to promote the greatest good for the greatest number. In these days, if he might use the expression, the man who made two blades of health to grow where only one grew before, was recognised as in truth a public benefactor.[18]

MHRs who opposed the Bill invoked more individualistic ideas, but such beliefs were not always clear and sometimes their statements were contradictory, although this is perhaps attributable to the weighing of competing viewpoints. This tendency is most clearly illustrated by the statements in the Legislative Council of George Marsden Waterhouse. Regarding the proposed Bill as 'essentially a panic measure', he argued that acting in panic could allow Parliament to 'adopt more stringent regulations in order to give thorough effect to its measures', but he then suggested that the negative outcome could be the risk of 'introducing provisions of a permanent character, which might be calculated to interfere with the liberty of the subject'.[19] In appearing to desire strict measures to deal with public health problems, while simultaneously fearing the impact that such measures might have on individual freedom, Waterhouse's comments encapsulated the tension between *laissez-faire* and providing for the public good.

Other ideas that influenced the Act were more specifically centred around New Zealand experience. One example is the influence of the system of provincial government. This was specifically addressed in parliamentary debate, and reflected a tension between the desire to allow a large amount of autonomy for individual provinces, and the recognition of the problems this could cause. The nature of provincial politics was hinted at in a comment made during debate in the Legislative Council:

> the power of declaring places within or without New Zealand to be infected should be jealously guarded by the Central Executive. If it were not so, they

[17] Bryder, p. 317.

[18] *NZPD*, Vol. XII, 23 July 1872, p. 24 (Gisborne).

[19] *NZPD*, Vol. XII, 13 August 1872, p. 439 (Waterhouse).

should see a battle of provincial jealousy being fought out. They would see one Province, by its proclamations, endeavouring to injure the other, and endeavouring to give another Province 'a slap in the face'.[20]

In October 1871, well before the first reading of the Public Health Bill, one member noted in the House of Representatives that an earlier attempt at a Public Health Bill in 1869 had failed 'on account of the opposition shown by some honorable members, who held ultra-provincial opinions with regard to the character of the Bill', and suggested that any new Bill 'would have to be delicately handled, as regarded provincial rights and other interests of that sort'.[21]

Consideration of issues such as provincial government did overlap with other debates, such as the concept of broader 'public good' versus individualism. Similar problems to those inherent in individualism were seen as likely to result from the autonomy of provinces. Instead of individuals forming a potential threat to public health by failing to consider the 'public good', the perceived threat was from rogue provinces. This was exemplified by the comment in the Legislative Council that public health matters 'should not be left entirely in the hands of the Provincial Governments; for the consequences of neglect and want of precaution in one place would not be confined to that place alone, but might cause the spread of the disease throughout the whole country'.[22]

The Public Health Act was finally passed into law on 1 November 1872.[23] While it was an important development, it was not without precedent. Two of its three sections, covering quarantine and vaccination, incorporated aspects of previous legislation. The section on quarantine gave the greatest power to the Governor, with the ability to delegate responsibility to either the Superintendent or the Central Board of Health of a Province. Ships coming into New Zealand could be held in quarantine to prevent infectious disease breaking out, and if disease did occur on land, quarantine regulations allowed for the cutting off of 'all communication between any persons infected and the rest of Her Majesty's subjects'.[24] The section covering vaccination provided for free compulsory vaccination against smallpox, and imposed penalties for those who did not comply; parents who did not have their children vaccinated were considered 'guilty of an offence' and could be fined up to forty shillings.[25] Public Vaccinators could be appointed by the Governor to carry out vaccination, and Vaccination Inspectors

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20 *NZPD*, Vol. XII, 13 August 1872, p. 441 (Waterhouse).

21 *NZPD*, Vol. XI, 17 October 1871, p. 356 (O'Neill).

22 *NZPD*, Vol. XII, 13 August 1872, p. 438 (Hall).

23 The Act remained in this form for its active life apart from one minor amendment passed on 12 October 1875, which stated that orders from the Governor in Council ordering the enforcement of the sections covering the activities of Boards of Health would remain in force until revoked if a period of time was not specified. Previously, such orders were to remain in force for a maximum of six months.

24 *Statutes of New Zealand (Statutes)*, 1872, No. LXVIII, Public Health Act, Section 54, p. 383.

25 *Statutes*, 1872, No. LXVIII, Sec. 108, p. 395.

appointed to ensure that the vaccination was carried out as the Act set out. All pupils in public schools were to be vaccinated, and those seeking employment in the public service had to be vaccinated. Vaccination had previously been made compulsory by the Vaccination Act of 1863 for all infants under six months, although another Vaccination Act in 1871 repealed this before compulsory vaccination was restored by the 1872 Public Health Act.[26] Quarantine had been provided for even earlier, with an Ordinance in 1842 containing a section on quarantine, and it had been legislated for number of ways before 1872, including Section II of the 1867 Marine Act, repealed with the passage of the Public Health Act, which allowed the Governor in Council to regulate for quarantine.[27]

The most important section of the Act, and the one that constituted its major innovation, was Part II, which set up the Central and Local Boards of Health, and put in place a number of sanitary regulations and minimum standards, which affected both businesses and private residences. Each province was to have a Central Board of Health, which was responsible for a number of Local Boards of Health. The status of Local Board of Health was to be given to existing local authorities, including City Councils and Highway Boards, or if no such body existed for an area, the Central Board could establish a new Local Board.[28] There were new responsibilities for householders and medical practitioners with regards to reporting the appearance of infectious disease. This division of responsibilities was a reflection of the 'new politics of heath', where power to define and control shifted more towards sanitary inspectors, doctors and other health professionals.[29] Figure 1, the diagram on the following page, summarises the structure of responsibilities under this section of the Act.

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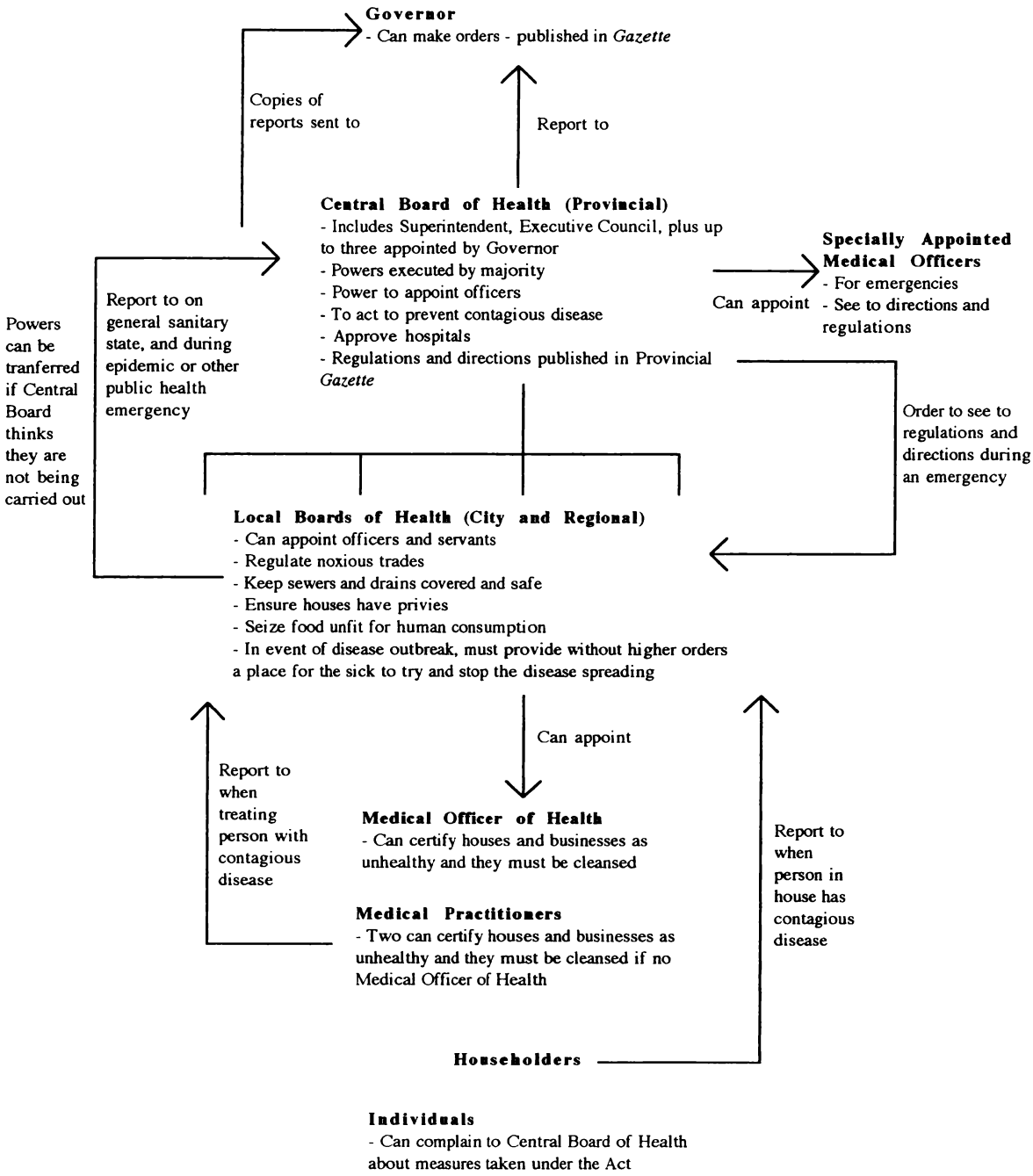
[26] Maclean, p. 11.

[27] Maclean, p. 36.

[28] *Statutes*, 1872, No. LXVIII, Sec. 6, 12, p. 371, pp. 372-73.

[29] Bashford, p. 3.

Figure 1: Division of Responsibilities Under Part II of the Public Health Act 1872



(Source: *Statutes*, 1872, No. LXVIII)

New statutory bodies and new official positions were established, each with particular responsibilities for implementing the Act and reporting to other authorities. The Governor appointed up to three members to the Central Board of Health and removed and replaced them 'at his pleasure'.[30] The Governor also received reports from the Central Boards. The other members of the Central Boards were the Superintendent and members of the Executive Council for each province. The Board executed its powers by majority, and these powers included approving hospitals, appointing officers, including specially appointed medical officers for emergencies, and acting to prevent contagious disease. The Central Board also had responsibility for the Local Boards of Health. It was able to order a Local Board to enact regulations and other directions during an emergency, and was empowered to take over the powers of a Local Board for six months if necessary. The Central Board of Health approved the composition of each Local Board of Health, appointing at least three of its members.

These Local Boards had a variety of powers and responsibilities. There was no maximum or minimum number of Local Boards set out by the Act. In the Auckland Province, the City Council was constituted as a Health Board for the central city, and nine Local Boards were formed in the suburbs, often from existing Highway Boards, such as Karangahape, Parnell and Grafton Road. In Thames, a board was formed for Thames itself, as well as separate boards for Highway Districts in the region, such as Waiotahi and Kauerenga. Local Boards had the power to keep sewers and drains covered and safe, ensure that houses had privies, and regulate 'noxious or offensive business trade[s]' such as abbattoirs and soap-boilers by granting or denying them permission to be established in a particular location.[31] In the event of the outbreak of disease, Local Boards were required to provide a place for the sick without being directed to do so by the Central Board, and to attempt to halt the spread of the disease. To aid in their tasks, Local Boards could appoint officers and servants 'as may be necessary'. This part of the Act was unclear about the status of such officials or the exact kind of duties that they should perform.[32] Local Boards were required to report to the Central Board of Health on the general sanitary state of their area of responsibility, as well as incidence of epidemics or other public health emergencies.

New responsibilities were also placed upon doctors, private individuals and business owners by the Act. Medical practitioners had to report cases of infectious disease to the Local Board of Health for their area. Any medical practitioner who treated a person with a case of 'smallpox cholera [sic] or other highly infectious disease dangerous to the people' had to report this, and the wording of the clause clearly indicated that this was intended as beneficial to the wider public good.[33]

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30 *Statutes*, 1872, No. LXVIII, Sec. 7, p. 372.

31 *Statutes*, 1872, No. LXVIII, Sec. 26, p. 377.

32 *Statutes*, 1872, No. LXVIII, Sec. 13, p. 373.

33 *Statutes*, 1872, No. LXVIII, Sec. 17, p. 374.

Similar responsibilities for reporting cases of disease were placed upon householders, who were required to report to the relevant Local Board if anyone in a house contracted an infectious disease. They were also responsible for keeping dwellings in a sanitary state. In both cases, penalties could be imposed for non-compliance; for medical practitioners, a fine of up to £10, and for householders, the costs for bringing the dwelling to a sanitary state could be incurred. Businesses had responsibilities to maintain minimum sanitary standards, and could be fined for not meeting these. Businesses selling food could also have their goods seized under the Act if they were regarded as unfit for human consumption. However, while householders and business owners had new responsibilities, they lacked power to define public health conditions within the framework of the Act.

This power was placed firmly with higher authorities such as the Central and Local Boards of Health. The way language was used in the text of the Act emphasised this shift towards greater inspection and social control of citizens. The public was placed under the gaze of new statutory authorities, and their control over their own sanitary arrangements lessened. The Central Board of Health had 'powers and duties' and the Local Boards 'powers rights [*sic*] and duties', while individuals simply had the duty to report the appearance of infectious disease.[34] Determining the acceptability of sanitary conditions was the prerogative of the Central and Local Boards. A Local Board could compel people to leave any dwelling it regarded as 'being in a neglected and filthy state' and move to 'a place of proper shelter', the Local Board defining what was 'proper shelter'.[35] Another clause stated that if the Medical Officer of Health or two medical practitioners regarded a house to be in 'such a filthy or unwholesome condition that the health of any person is endangered thereby', the householder could be compelled to have it cleaned.[36] If infectious disease broke out, a Local Board had the responsibility to provide a place for the sick, but also the right to define what it 'judged best for their accommodation and the safety of the inhabitants'.[37]

Funding was a major factor influencing the effectiveness of the implementation of the Act, so it is necessary to outline how the Act provided for funding of Central and Local Boards of Health and other officials. The Central Board of Health could be provided with funds by the Governor, and any of this money that was recovered from Local Boards was to be 'repaid into the Public Account'.[38] Local Boards of Health were similarly unable to raise their own funds, and any money for their expenses was 'to be paid out of the general city town borough or district rates', although it was not stated exactly how this money was to

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[34] *Statutes*, 1872, No. LXVIII, Sec. 8, 12, p. 372.

[35] *Statutes*, 1872, No. LXVIII, Sec. 21, p. 375.

[36] *Statutes*, 1872, No. LXVIII, Sec. 33, p. 379.

[37] *Statutes*, 1872, No. LXVIII, Sec. 23, pp. 375-76.

[38] *Statutes*, 1872, No. LXVIII, Sec. 11, p. 372.

be allocated to Local Boards or how they might claim expenses.[39] This lack of attention by legislators to the financial realities of the day-to-day administration of public health matters was to be exposed when the Act was in force. Lack of monetary resources presented a major hindrance to effective enforcement of the new legislation.

The 1872 Public Health Act marked the start of a new era in New Zealand's public health history. It extended the social control of citizens in a public health context, giving power and responsibility to health boards and other officials, while giving responsibility but little power to individuals, who had to report infectious diseases and submit to compulsory vaccination. While often regarded by historians as largely a reaction to the smallpox outbreak of 1872, the Act needs to be seen in the wider context of ideas at the time. In particular, the Act was strongly influenced by international experience, shaped to fit the New Zealand context. Ideas such as the tension between *laissez-faire* and the 'public good', present in the parliamentary debates, were also reflected in the final Act itself. The following chapter looks at how these regulations and responsibilities set up under the Act worked in a practical context within Auckland Province, examining the implementation of the Act at various levels of local responsibility.

39 *Statutes*, 1872, No. LXVIII, Sec. 13, p. 373.

Chapter Three: The Public Health Act in Action in Auckland, 1872-1876

During 1876, the final year in which the Public Health Act of 1872 was in operation, the Local Health Officer for Rauarenga District in Thames, wrote to the Central Board of Health for Auckland Province:

> I have the honor to enclose a memo from Dr. Payne announcing the existence of scarlet fever in this District. The Local Board have [*sic*] warned the occupants of the infected house to isolate themselves as much as possible and by strict attention to the cleanliness of the premises to check as far as lays in their power the further spread of the disease.
>
> Having no funds at its disposal the Local Board is powerless to carry out any other preventative measures.[1]

This letter illustrates some of the themes present in the administration of the Public Health Act of 1872 in Auckland Province. Authorities acted as far as they possibly could, but were often limited various factors. In this case, lack of funds was the main problem, but other difficulties also hindered the Act's implementation, including a lack of knowledge of the Act's provisions. Thus commitment to the 1872 Public Health Act in Auckland Province cannot be measured only in what was achieved in the way of public health improvements. It is also necessary to examine whether there was a will to act.

This chapter examines the commitment to the Act at various levels in Auckland Province, focusing mainly upon Auckland and its suburbs. The Provincial Government, which had financial responsibilities, in examined first, followed by possible reasons for the delay between the passing of the Act and its active implementation. While it is difficult to attribute changes in health conditions to the implementation of the Act, it is possible to see how changing health conditions may have influenced how actively the Act was enforced. While changing mortality statistics are not the same as changing health conditions, the former can provide an indication, albeit problematic, of the latter. Commitment to the Act from Local and Central Boards of Health and individual officials charged with enforcing the Act is addressed. In examining this commitment, this chapter examines not only what was achieved, but also how far there was a will to act.

The Public Health Act reserved the greatest powers for the Provincial Government, which controlled the purse strings. Derek Dow briefly mentions this aspect of the Act, noting that the Auckland Provincial Council in June 1874 'vetoed a proposal to include £600 for public health in the annual estimates; [but] members were, however, willing to spend £800 on the inspection of sheep'.[2] This oversimplifies matters, ignores that while a proposal for £600 was rejected, £300 was allocated. Nevertheless, the evidence of spending under the Act does show a

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[1] R.M. Mitchell (Local Health Officer for Rauarenga District) to Secretary of Central Board of Health, 28 March 1876, AP, 10/3, ANZW.

[2] Dow, p. 25.

limited amount of commitment at the fiscal level.[3] The Provincial Council first allocated money for the implementation of the Public Health Act in late 1874. Table 1 below shows selected aspects of Provincial Council health spending, to the nearest pound, including monies allocated to the Public Health Act, as well as expenditure for the Public Health Act as a percentage of total Provincial Council spending.

Table 1: Provincial Council Health Expenditure, 1874-1876

Quarter Ending	Public Health Act	Hospital	Adulteration of Food Act	Public Health Act as % of Total Spending
31.12.1874	£115	£704	-	0.2
31.3.1875	£99	£702	£255	0.5
30.6.1875	£120	£998	£229	0.3
30.9.1875	£60	£502	-	0.1
31.12.1875	£90	£755	-	0.3
31.3.1876	£108	£773	-	0.4
30.6.1876	£96	£812	-	0.2
30.9.1876	£120	£1073	-	0.4

(Source: *Auckland Provincial Government Gazette*, 1874-1876)

While there was some fluctuation in spending, overall expenditure under the Public Health Act was a tiny proportion of total Provincial Council spending. This expenditure also took little account of the increasing population of Auckland Province, which grew from around 70,000 to around 80,000 people during this period. Other aspects of health expenditure received more generous allowances. The Provincial Hospital received more significant funding, as did the Adulteration of Food Act 1866, a result of a laboratory established and an analyst appointed in 1875.[4] Such spending suggests that the lack of funding for the Public Health Act reflects attitudes in the Provincial Council about which were the most effective ways of achieving healthy conditions, rather than a total lack of commitment to health matters.

Practical application of the Act began very slowly and tentatively, and was not significant until 1874, perhaps in part a result of the delay in funding. It is possible to argue that the Act itself was a reaction to immediate circumstances, namely the outbreak of smallpox, but in Auckland Province at least, its implementation was not.[5] The Central Board of Health held its first meeting in February 1873, which simply recognised that the Act was in force, and did not hold another until 15 April 1874 when spurred into action by the quarantine of the ship the *Dorette*. Soon after this, an increase in death rates seemed to spur activity on the part of the Central Board, which noted in a circular to all Local Boards that there was an 'increasing number of deaths in the City and Suburbs of Auckland, from

[3] *Journals of the Auckland Provincial Council (JAPC)*, Session XXIX, 15 June 1874, p. 127.

[4] Maclean, p. 107.

[5] Bryder, p. 317.

diseases supposed to be created by defective drainage, and other nuisances'.[6] Local Boards were similarly slow to act. Most of their activity was concentrated in the final two years of the Act's life, which suggested that the activity that did occur was not an immediate reaction to the smallpox outbreak, but resulted from an increasing recognition of more pernicious health threats, as indicated by mortality statistics.

The incidence of diseases such as typhus and typhoid perhaps provided an important stimulus on the part of the Boards of Health to act. Tables 2 and 3 below show, respectively, the number of deaths from specific infectious diseases relative to deaths from all causes, and deaths from these diseases relative to the total population, both as a rate per one thousand in Auckland Province.

Table 2: Cause-Specific Death Rates: Selected Infectious Diseases Relative to All Deaths, Auckland Province, 1872-1876

Year	Whooping Cough	Diarrhoea/Dysentery	Typhus/Typhoid	Measles
1872	0	120	31	0
1873	125	79	12	0
1874	6	135	33	0
1875	0	103	54	105
1876	20	84	32	0

(Source: *Statistics of New Zealand*, 1872-1876)

Table 3: Death Rates: Selected Infectious Diseases, Auckland Province, 1872-1876

Year	Whooping Cough	Diarrhoea/Dysentery	Typhus/Typhoid	Measles
1872	0.0	1.5	0.4	0.0
1873	1.7	1.1	0.2	0.0
1874	0.1	1.8	0.4	0.0
1875	0.0	1.9	1.0	2.0
1876	0.3	1.2	0.4	0.0

(Source: *Statistics of New Zealand*, 1872-1876)

When examining such figures, a number of factors need to be taken into account. The victims of the worst killers, diarrhoea and dysentery, were mainly infants and young children. In 1874 and 1875, two of the worst years for these infections, over eighty-five per cent of deaths from these causes were of those aged under five years.[7] Compared to some European cities the proportion of the death rates attributable to diarrhoeal-type diseases were severe. In Scottish cities, for example, the mean cause-specific death rate for diarrhoea and dysentery was of thirty out of every one thousand deaths in cities in the 1870s, and fewer that one in every thousand people living died from these causes each year.[8] Geoffrey Rice suggests

[6] Vincent E. Rice (Secretary of Central Board of Health), Circular distributed to all Local Boards of Health in Auckland Province, 20 May 1874, AP, 10/2, ANZW.

[7] *Statistics of New Zealand*, 1874-75.

[8] *Scottish Population History from the 17th Century to the 1930s*, ed. by Michael Flinn (Cambridge: Cambridge University Press, 1977), p. 398, p. 402.

in his study of Christchurch that diarrhoea was 'accepted as an inescapable scourge of childhood'.[9] Arguably, the infectious diseases to which adults were more likely to succumb had a greater impetus for public health initiatives than infections commonly afflicting children.

High infant mortality needs to be seen in the light of a population age structure very different from that in Europe. Auckland Province had many recent young migrants, many of whom brought their children with them, or gave birth to large numbers of children in New Zealand. Indeed, despite high infant mortality from diseases such as diarrhoea, large numbers of infants remained healthy, and in the ten years to 1876, there was a natural increase of almost 16,000 in the province.[10] Measles and whooping cough presented epidemic rather than endemic threats to health, and once again, were primarily afflictions of childhood. It seems likely that typhus and typhoid were the most important diseases in terms of the implementation of the 1872 Act, especially as the former was commonly associated with arriving immigrants. Deaths from these diseases remained at a high but relatively steady rate, apart from a peak in 1875, the year in which implementation of the Act reached its height. The beginning of widespread activity under the 1872 Act also coincided with the peak period of immigration in the 1870s, which created a greater need to address public health matters. While in 1873, 2980 migrants arrived at the Port of Auckland, in 1874 this jumped to 6179, and in 1875 there were 6762 migrants.[11]

As these figures imply, health problems that existed before the passage of the Act persisted after 1872. The uncontrollable influence of weather conditions played a major part in this trend. The weather was often still the most significant factor determining the quality of public health, a fact recognised by both the *Herald* and those charged with carrying out the functions of the Act. In March 1874, the *Herald* suggested that the 'very bad' sanitary state of Auckland was largely 'due to the long, hot season we have been afflicted with', while later that year, the Health Inspector F.H. Heighway warned that 'the rapidly approaching warm weather' could make some nuisances 'hot beds for disease'.[12] This realisation sometimes led to a sense of weary resignation, as when a *Herald* commentator noted casually in January 1875 that 'the typhoid fever season is about due in Auckland'.[13] Poor housing conditions also persisted through the period of the Act's implementation. In June 1875, the *Herald* reported the existence of 'dilapidated houses', likely to adversely affect the health of the occupants, and which were 'uninhabitable at this

9 Rice, p. 89.

10 *Statistics of New Zealand*, 1876.

11 *Statistics of New Zealand*, 1873-75.

12 *NZH*, 24 March 1874, p. 2; F.H. Heighway, No. 4 Report, 31 August 1874, AP, 10/2, ANZW.

13 *NZH*, 25 January 1875, p. 2.

season of the year; neither wind-tight nor water-tight'.[14]

Sometimes there was recognition that, even if conditions were not necessarily improving, they were not getting worse. A letter from Health Officer William Stockwell, published in the *Herald* in March 1874, suggested that typhoid fever was 'generally prevalent at this season of the year', and 1874 was no exception, so there was 'no reason to think it more prevalent or of a more virulent type at present than in previous years'.[15] The Central Board of Health also recognised that health conditions were often largely unaffected by human intervention, and were unable to attribute the generally good health of inhabitants of Auckland Province in the year to June 1874 to the actions of local authorities to prevent disease and remedy nuisances.[16] That commentators such as those in the *Herald* concentrated on the sanitary problems of Auckland and its suburbs suggests that poor public health conditions were viewed by contemporaries as a problem stemming from urban life.

Nevertheless, some improvement and change is evident, although it did not necessarily conform to any kind of pattern of linear progress, and perceptions of change were dependent on who recounted them. While the *Herald* was eager to point out the sanitary deficiencies of the city on a regular basis, those charged with dealing with them under the Act often tended to present a more positive picture. The Auckland City Local Board of Health reported in 1875 that 'a great deal of disease [had] prevailed within the city', but that sanitary matters were regularly attended to, including regular inspection of drains and emptying of privies.[17] The following year, the Local Board noted that 'the health of the city has much improved', including a 'marked improvement' in infant mortality, and that the sanitary state of the city was good, and regularly attended to in order to 'remove any matter of a filthy nature'.[18] Health Inspector F.H. Heighway also noted improvements in sanitary conditions in his area of responsibility. He suggested on one occasion that despite the 'very exceptional weather', health conditions had not markedly worsened, and he believed that it was 'perhaps not unreasonable to conclude that malaria has been checked' by his preventative measures.[19] He did recognise that what he could achieve was very limited, and he commented in 1874 with reference to Mt Eden that 'comparatively minor evils have been remedied, yet others of greater difficulty' had still required attention. His use of the term 'evils' invoked the discourse about disease which portrayed it as an 'evil' and 'abomination' presenting

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[14] *NZH*, 2 June 1875, p. 2.

[15] *NZH*, 26 March 1874, p. 3.

[16] T.M. Philson and Vincent E. Rice, 'Report by the Central Board of Health for the Province of Auckland', 20 June 1874, *Appendices to the Journals of the House of Representatives (AJHR)*, 1875, H-22, p. 2.

[17] George Goldie to Secretary of Central Board of Health, 5 April 1875, *AJHR*, 1875, H-22, p. 3.

[18] George Goldie (Chairman of City of Auckland Local Board of Health) to Central Board of Health, *AJHR*, 1876, H-5, p.2.

[19] F.H. Heighway, No. 28 Report, 31 January 1876, AP, 10/3, ANZW.

a barrier to increasing civilisation.[20]

Despite the motives of those giving this interpretation, it cannot be denied that improvement did sometimes occur, and sanitary conditions were often good, a fact which the *Herald* sometimes accepted almost grudgingly. Despite the *Herald*'s many reports on poor health conditions, it agreed in January 1873 that Auckland was 'relatively healthy'; overall mortality was not higher than 'in the majority of colonial towns'.[21] Two years later, the *Herald* offered a similar judgment, and stated that New Zealand, unlike Victoria in Australia, was 'comparatively free' of the 'dread plagues' of typhoid fever, diphtheria and puerperal fever.[22] Indeed, levels of some infectious diseases remained low in Auckland Province in the period in which the Act was in force. The small pox outbreak that contributed to the creation of the Act was relatively minor, diseases such as cholera and scarlet fever caused few deaths, and reports from Local Boards of Health typically reported a good sanitary state and small outbreaks of disease. A report from the Newmarket Local Board of Health stated that the area was generally free from infectious disease, and was in a good sanitary state, apart from a few problems such as the 'occasionally very strong' smell from a slaughterhouse and refuse polluting a creek, apparently from a brewery, from which 'the smell [was] very offensive'.[23]

While sanitary conditions and levels of infectious disease continued to cause problems in Auckland after the Act was passed, those charged with implementing the Act often did their best to try and remedy them. The execution of the Act was the ultimate responsibility of the Central Board of Health. In view of its limited resources, the Central Board did effect some positive change. In general, the Central Board worked well within the parameters of the Act, and tried to keep the Local Boards active. Although not meeting on a regular basic until 1874, it tried to address a wide range of public health issues, and its commitment to the Act manifested itself on a number of levels. The Board tried to avoid distancing itself from the day to day running of the Act, and took an interventionist approach to particular public health nuisances. Meeting on 15 May 1874, the Board discussed such problems as a urinal on Queen Street, drainage from two breweries on Eden Terrace, and the lack of drainage in a street in Parnell.[24] This approach was epitomised by the case of a night soil depot at Arch Hill, within the jurisdiction of the Newton Local Board of Health. The Local Board wrote to the Central Board on 7 May 1874 requesting that the Central Board do something about the nuisance. The Board utilised section 25 of the Act to take over the powers of the Local Board

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20 F.H. Heighway, No. 9. Report, 16 November 1874, AP, 10/2, ANZW.

21 *NZH*, 20 January 1873, p. 2.

22 *NZH*, 1 March 1875, p. 2.

23 John McNeill (Chairman of Newmarket Local Board of Health) to Secretary of Central Board of Health, 17 May 1876, *AJHR*, 1876, H-5, p.3.

24 Minutes of the Meeting of Central Board of Health for Auckland Province, 15 May 1874, AP, 10/1, ANZW, p. 20.

for six months, giving notice to the City council that 'unless measures are taken to do away with the nuisance caused by the Night Soil Depot at Arch Hill within seven days from that date, the Central Board will take action at the expense of the City Authorities'.[25] Such commitment remained until the Board's final days. At one of their final meetings, they called on the Local Board of Health for Eden Terrace to 'take immediate steps to compel the owners of property at Eden Terrace to abate the nuisance existing' in the case of problematic ponds.[26]

The Central Board did not, however, lose sight of the needs of administration at other levels, including securing funding. On 18 April 1874 it was agreed that the Board should 'make application to the General Government for funds ... or [the] authority to incur expenditure' in order to fulfil its responsibilities under the Act, although no reply appears to have been received.[27] The Central Board was also aware of other problems with the Act, and the way it addressed these showed both a strong knowledge of the Act and a willingness to make it work for the good of public health in Auckland Province. In a memorandum to the Colonial Secretary, the Central Board argued that lack of clarity in the Act over the respective powers of the Central and Local Boards of Health left the two Health Inspectors 'powerless to Act' against some nuisances, suggesting that more powers be given to the Central Board, with the activities of the Local Boards confined to 'those of a purely local concern'.[28]

Perhaps inevitably, the commitment to the Act of the Local Boards of Health was highly variable, but some did have a genuine desire to achieve something, and the wide variety of reasons for the differing levels of commitment have not really been explored in previous historical accounts. While the Act legislated that local governing bodies become Local Board of Health, this was not enforced by the Central Board, and it was usually up to Local Boards to request to be constituted as such. The fact that the vast majority of those that did were concentrated in Auckland and its suburbs further supports the idea that public health was seen primarily as an urban problem. Sometimes the formation of Boards occurred at a late stage in response to the appearance of infectious disease, such as the request by the Devonport District Board to become a Local Board of Health upon the appearance of typhoid in early 1876.[29] Other local authorities took greater initiative. The

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25 Minutes of the Meeting of Central Board of Health for Auckland Province, 22 June 1874, AP, 10/1, ANZW, p. 28.

26 Minutes of the Meeting of Central Board of Health for Auckland Province, 20 January 1876, AP, 10/1, ANZW, p. 80.

27 Minutes of the Meeting of Central Board of Health for Auckland Province, 18 April 1874, AP, 10/1, ANZW, p. 16. The minutes for the next meeting, on 15 May 1874 note that that the letter was sent to the Colonial Secretary, dated 20 April, but no reply had been received, and this correspondence is not mentioned again in the minute book.

28 T.M Philson and Vincent E. Rice to Colonial Secretary, Memorandum by the Central Board of Health for the Province of Auckland, 15 September 1875, AP, 10/3, ANZW.

29 P. Maye (Chairman of Devonport District Board) to Central Board of Health, 12 February 1876, AP, 10/3, ANZW.

Parnell Board of Health, for example, formed early and was very active. Even before the Central Board of Health issued instructions to Local Boards, the Parnell Board had appointed a doctor, Charles Goldsboro, as Medical Officer.[30] When the Central Board did give directions to Local Boards and provided copies of the Act in 1874, Parnell was one of only two Local Boards to send back a reply, stating that a Goldsboro had been instructed to enforce the Act's provisions.[31] The Parnell Board also reported the appearance of disease to the Central Board on a regular basis. For example, in March 1876, Goldsboro informed it of three cases of diphtheria, two of which were fatal, and noted that '[e]very precaution has been taken to prevent the spread of the disease'.[32] Other Boards showed high levels of activity, including the Auckland City Board, which regularly reported cases of infectious disease, and willingly carried out directives from the Central Board, such as a request to clean the urinals on Queen Street.[33] Some other Boards avoided carrying out requests or prevaricated, such as the Eden Terrace Board, which in reply to the Central Board of Health's order to deal with the problem of polluted ponds, suggested that 'the season [is] too far advanced for anything permenent [*sic*] to be done'.[34]

Apathy did play some part in limiting the Act's effectiveness. The Central Board of Health and the Health Inspectors sometimes complained that the Local Boards were not carrying out their duties. In its annual report of June 1876, the Central Board of Health noted that the Local Boards had rarely utilised the assistance of the two Health Inspectors, and that '[t]he generally good health of the inhabitants of the province during the past year may be attributed rather to the climate than any other circumstance'.[35] This perhaps suggests that the idea of 'inspection', well established in institutions such as schools, and other forms of regulation such as weights and measures, was not so readily accepted in the context of public health. The reports of the Health Inspector F.H. Heighway presented similar examples. In one case, he noted that in the instance of polluted ponds on Eden Terrace, the Chairman of the Local Board of Health for the areas had done nothing 'farther than talk the matter over with the Trustees', and Heighway did not believe that 'he [was] inclined to move further therein of his own accord'.[36]

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30 W.A. Riesling (Chairman of Parnell Local Board of Health) to Secretary of Central Board of Health, 2 June 1873, AP, 10/2, ANZW.

31 W.A. Riesling (Chairman of Parnell Local Board of Health) to Secretary of Central Board of Health, 29 May 1874, AP, 10/2, ANZW. The only other Local Board to reply was that of Auckland City, with a lengthy letter from mayor P.A. Phillips.

32 Charles Goldsboro (Medical Officer of Health for Parnell Local Board of Health) to Central Board of Health, 10 March 1876, AP, 10/3, ANZW.

33 Town Clerk to Central Board of Health, 9 June 1874, AP, 10/2, ANZW.

34 E. Strass (Secretary of Eden Terrace Highway Board) to Secretary of Central Board of Health, 2 June 1876, AP, 10/3, ANZW.

35 T.M. Philson and Vincent E. Rice, 'Report of the Central Board of Health for the Province of Auckland', 10 June 1876, *AJHR*, 1876, H-5, p. 2.

36 F.H. Heighway, No. 31 Report, 26 April 1876, AP, 10/3, ANZW.

Other possible reasons for a lack of action include conflicts of interest, the lack of funding and the lack of knowledge of the Act. Some Local Board officials found their responsibilities under the Public Health Act at odds with their private business interests. In one case, Joseph Warren, a store keeper and chairman of the Newton Board of Health, told Health Inspector F.H. Heighway that 'carrying out the measures required of him in the Public Health Act would be his ruin'.[37]

Inevitably, funding was also a major problem, since the Act itself did not make clear and adequate provision for the reimbursement of expenses for the Boards of Health. Letters to the Central Board from Local Boards often indicated a desire to provide assistance and remedy health problems that was frustrated by a lack of funding. This problem was expressed by the Auckland Mayor P.A. Phillips, writing on behalf of the Local Board of Health for the City of Auckland, to the Central Board of Health:

> ...while serious responsibilities are imposed upon the City Council under the Public Health Act, no provision is made for the expenses necessarily incurred in carrying out the same, but an additional charge is thereby entailed on the already overstrained City Fund.[38]

In another example, the Parnell Board of Health reported a case of a family with 'two boys very ill with typhoid fever', and a father out of work. The Local Board, without sufficient funds to act, called on the Central Board 'to take such steps as [it] may deem necessary', and in addition noted that, in the circumstances, 'assistance afforded to [the family] will be most acceptable'.[39] Local Boards also anticipated possible future problems because of their lack of resources, as in the case of the Waiotahi District Local Board of Health. It noted in its report of March 1875, that if an outbreak of infectious disease occurred, 'for the want of a house in which patients could be isolated, [the Board] would be powerless to prevent such disease spreading'.[40]

While the Central Board did sometimes complain of lack of action by the Local Boards, on other occasions it did recognise that a genuine desire to act among the Local Boards was frustrated by limited resources. Thomas Philson and the Secretary of the Central Board, Vincent E. Rice argued in an annual report of June 1874 that:

> It has been found from experience that, while there is every desire on the part of the Local Boards of Health to enforce the provisions of the Act within their respective districts, they are unable through lack of funds systematically and

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37 F.H. Heighway to Chairman of Central Board of Health, 30 June 1875, AP, 10/3, ANZW.

38 P.A. Phillips (City of Auckland Mayor) to Central Board of Health, 21 May 1874, *JAPC*, Session XXIX, 1874, Appendix A, No. 21A, p. 2.

39 H Brett (Chairman of Parnell Local Board of Health) to Chairman of Central Board of Health, 1 June 1876, AP, 10/3, ANZW.

40 W. Rowe (Chairman of Waiotahi District Local Board of Health) to the Chairman, Central Board of Health, 26 March 1875, *AJHR*, 1875, H-22, p. 4.

effectively to do so.[41]

Philson and Rice also noted in a letter to the Colonial Secretary in Wellington, that 'the Local Boards cannot find the means out of their ordinary rates to provide for enforcing the Act in their respective districts', suggesting that they believed that the Boards had attempted to do what they could with limited funds.[42]

Lack of knowledge of the Act is frequently apparent in correspondence from Local Boards of Health to the Central Board of Health. This was not helped by tardy action of the Central Board, which did not issue a standard circular to all the Local Boards until May 1874. The circular was distributed with a copy of the Act, and drew attention to the clauses dealing with sewers, drains and the like, and called on the Boards to adopt 'rigorous measures for eradicating such nuisances as may be found to exist' within each Board's jurisdiction, a task which many Boards seemed tentative and uncertain about.[43] This uncertainty manifested itself in frequent requests for advice from the Central Board of Health. A letter from the Auckland mayor, representing the Local Board of Health for Auckland City, provides a typical example. He noted the desirability of avoiding the spread of Scarlet Fever from Thames to Auckland, and stated that he would 'be glad if anything can be suggested by the Central Board to prevent such a calamity'.[44]

In other cases, Local Boards showed more specific ignorance of particular responsibilities under the Act. This sometimes occurred as soon as a Local Board came into force. In 1873, the Secretary of the Grafton Road Local Board queried, after being informed that the sections of the Act giving the Local Board its powers were in force, whether a system of earth closets should be enforced, since 'it states that the date for such is fixed for June 1st 1875'.[45] Once the Act had been in force for some time, Local Boards sometimes asked for advice in their responsibilities in dealing with a particular disease outbreak. One example was the Otahuhu Board, which enclosed a copy of a letter from a doctor reporting a family with typhoid fever, and stated that the Board was 'ignorant of what course [they] should pursue'.[46]

Despite a lack of funding and a lack of knowledge, such queries to the Central Board of Health indicate an expressed willingness to act, which has not

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41 T.M. Philson and Vincent E. Rice, 'Report by the Central Board of Health for the Province of Auckland', 20 June 1874, *AJHR*, 1875, H-22, p. 2.

42 T.M Philson and Vincent E. Rice to Colonial Secretary, Memorandum by the Central Board of Health for the Province of Auckland, 15 September 1875, AP, 10/3, ANZW.

43 Vincent E. Rice (Secretary of Central Board of Health), Circular distributed to all Local Boards of Health in Auckland Province, 20 May 1874, AP, 10/2, ANZW.

44 R. Fowles to Central Board of Health, 12 May 1876, AP, 10/3, ANZW.

45 Robert Ashton (Secretary of Grafton Road District Board) to Central Board of Health, 14 March 1873, AP, 10/2, ANZW.

46 Edward Plumley (Chairman of Otahuhu Highway Board) to Central Board of Health, 10 June 1875, AP, 10/3, ANZW.

been fully recognised until now. Maclean argues from the annual report of June 1874 that the Central Board of Health 'deplore[d] [the Local Boards'] indifference'.[47] This is inferred from the Central Board's comment that in the case of some Local Boards, 'no effort appears to have been made in the direction of removing or remedying the many sources of nuisance which exist'. But by ignoring the comment later in the report that the Boards did desire to act but were limited by lack of funds, Maclean equates commitment to the Act among Local Boards only with actual material results.[48] The regular correspondence from Local Boards such as Parnell and Auckland City also indicates a that level of activity existed that belies previous interpretations.

Even when the Act was relatively well understood, its details were often unclear, but such problems did not necessarily mean that Local Boards did not try to do as best they could within these limitations. While some Local Boards lacked knowledge of the Act, occasionally a Board knew enough to propose changes to make their work more effective. In 1875, the Local Board of Health for Auckland City drew up a list of proposed amendments to the Act, including rating powers for Local Boards to help pay for their activities and compulsory dustbins in yards. The Board also attempted to gain clarification of some points of the Act that were not well defined, including how compulsory earth closets would be paid for, and indeed what exactly terms such as 'earth closet' and 'cesspit' meant in terms of the Act.[49] The Parnell Local Board also suggested changes, and in July 1876 recommended that 'increased powers should be granted to some person or Central Body perfectly independent of all local interests and influences'.[50] Such concern about problematic details of the Act was certainly not unfounded, since those who wished to evade sanitary responsibilities were sometimes able to find loopholes in particular clauses, further limiting the powers of the Boards of Health to act. In one case, John Allender, the manager of a soap factory in Parnell, when notified that he could not 'render fat on the premises', took advantage of clause 24 of the Public Health Act which only allowed authorities to enter a business during the day time, and operated his factory at night.[51]

Much of the day to day running of the Act in Auckland was the responsibility of individual officials, who held their own views on public health and whose individual perspectives strongly coloured their accounts of public health administration. Most notable among these were the two paid Health Inspectors

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47 Maclean, p. 128.

48 T.M. Philson and Vincent E. Rice, 'Report by the Central Board of Health for the Province of Auckland', 20 June 1874, *AJHR*, 1875, H-22, p. 2.

49 Town Clerk's Office Auckland, Suggested Amendments "Public Health Act" by the Local Board, 15 July 1875, AP, 10/3, ANZW.

50 R. Brett (Chairman of Parnell Local Board of Health) to Chairman of Central Board of Health, 5 July 1876, AP, 10/3, ANZW.

51 R. Brett (Chairman of Parnell Local Board of Health) to Chairman of Central Board of Health, 18 November 1874, AP, 10/2, ANZW.

appointed in 1874, who reported to the Central Board and whose services were at the disposal of the Local Boards. Their salaries came from the provincial government funding that began in that year. F.H. Heighway was assigned to the western suburbs, and Patrick H. Kinsella to the eastern suburbs. While both were active and reported regularly to the Central Board of Health, F.H. Heighway wrote by far the more detailed and descriptive reports. This suggests a commitment to his task that went beyond the requirements of regularly reporting on sanitary conditions, and provides for rewarding analysis. His ideas about public health remained relatively unchanged throughout his time working under the Public Health Act, and were strongly tied to the 'miasmatic' theory of disease spread, although this was being challenged during this period. In one report he suggested that some nuisances would become 'hot beds of disease and production of dire results'; the disease spread by 'gases' emanating from them.[52] Similarly, in 1876 he argued that the pond nuisance at Mt Eden 'would soon become intolerable, and dangerous to health' if it was not dealt with.[53]

Nevertheless, Heighway's reports cannot be taken at face value. He presents his work as dedicated and almost heroic, 'unremittingly engaged in all weathers discharging my official duties ... which I have every confidence in believing will result in beneficial results to the communities residing therein'.[54] In his final report, he is almost hoping that history will judge him well, as well as anticipating future employment, 'trusting that [his] services will be remembered as worthy of approval and future advancement in the Government service'.[55] He appeared to be presenting as positive a picture as possible, even to the extent of self-mythologising, and his language reflected prevailing ideas at the time that public health reform was a kind of civilising crusade. Heighway does appear to have been strongly committed to public health, however, and he achieved some positive results in the removal of problematic public health 'nuisances'. This was acknowledged by the Newton Board, which praised him for his 'valuable services' and attributed 'the present satisfactory sanitary condition' to his work.[56]

Thomas Philson was another key figure in the implementation of the Act, and like Heighway, his perspectives were well documented and thus provide some insight of how individual officials approached and understood public health matters. He had been a prominent figure in health matters in New Zealand for some time. In 1859, after a few years of private practice, he was appointed provincial surgeon and superintendent at Auckland Hospital, and he became a member of the

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52 F.H. Heighway, No. 4 Report, 31 August 1874, AP, 10/2, ANZW.

53 F.H. Heighway, No. 36 Report, 30 September 1876, AP, 10/3, ANZW.

54 F.H. Heighway, No. 6 Report, 30 September 1874, AP, 10/2, ANZW.

55 F.H. Heighway, No. 38 Report, 30 November 1876, AP, 10/3, ANZW.

56 Francis J. Jones (Chairman of Newton Local Board of Health), 'Report by the Central Board of Health for the Province of Auckland', 22 April 1875, *AJHR*, 1875, H-22, p. 3.

highly active Central Board of Health for Auckland Province.[57]

Philson's commentaries in his annual medical returns provide insight into the way his views shaped his public health activities. One particularly notable aspect was his attitude to immigrants, an issue that is largely absent from other discussions of attitudes to public health at this time. He noted in his annual medical returns for the Provincial Hospital for 1874, a peak year for immigration, that cases of measles had reappeared in Auckland 'after an absence of upwards of 20 years', adding that '[i]t may be remarked that not a few of our hospital patients are derived from recent immigrants, in the shape of consumptives, imbeciles, and cripples, evincing the need for more stringent selection by the home agents'.[58] The following year, noting the increase in typhoid fever, Philson commented that it was 'remarkable that most of the hospital cases of the disease occurred in recently arrived immigrants'.[59] Philson's beliefs about public health also encompassed religious ideas which linked disease to morality.[60]

Like the Local Boards of Health, private individuals and business owners varied in their commitment to the Act. Some did begin to place more importance on public health matters. Health Inspector F.H. Heighway noted in September 1874 that 'a disposition [has been] evinced to reform which shows that people are beginning to become alive to the dangers which threaten a continued disregard for those conditions by which public health is maintained'.[61] This was certainly not universal, however, and the differing perspectives on dirt between those in authority and much of the general public sometimes became clear. Writing for the Auckland City Local Board of Health, Mayor P.A. Phillips believed that maintaining sanitary conditions was a moral responsibility, arguing that '[i]f the citizens themselves would pay more attention to sanitary regulations, the duties of the Officers of the Local Board of Heath would be considerably lightened'.[62] The records of the Central Board of Health do, however, reveal some increased interest in public health matters among the public through letters and petitions. The activities of John Allender's soap factory in Parnell, discussed above, resulted in much correspondence and a petition against it. The Central Board of Health also received occasional letters from individuals who reported that they had carried out

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57 *Dictionary of New Zealand Biography*, p. 385.

58 T.M. Philson (Provincial Surgeon), Provincial Hospital: Annual Medical Returns, 1874, February 1875, *Auckland Provincial Government Gazette (APGG)*, 18 March 1875, p. 105, p. 206.

59 T.M. Philson (Provincial Surgeon), Provincial Hospital: Annual Medical Returns, 1875, February 1876, *APGG*, 8 March 1876, p. 88.

60 Wilton and Patrick Henley, 'The First Auckland Hospital', in *The Story of Auckland Hospital 1847-1977*, ed. by David Scott (Auckland: Medical Historical Library Committee of the Royal Australasian College of Physicians of New Zealand, 1977), p. 14.

61 F.H. Heighway, No. 6 Report, 30 September 1874, AP, 10/2, ANZW.

62 P.A. Phillips (City of Auckland Mayor) to Central Board of Health, 21 May 1874, *JAPC*, Session XXIX, 1874, Appendix A, No. 21A, p. 1.

responsibilities under the Act, such as Robert M. Houston, a teacher at Otara School, who reported in early 1873 that he had received an extract from the Public Health Act, and that all but one child had been vaccinated at the school, and that the one exception had failed to be vaccinated successfully, but would be revaccinated by the Public Vaccinator.[63] And while some businessmen such as John Allender displayed contempt for public health measures, others showed willingness to comply with new requirements. In his second report, Health Inspector F.H. Heighway noted that 'proprietors and others are daily becoming more alive' to sanitary matters.[64]

On close scrutiny of the the implementation of the 1872 Public Health Act in Auckland, a much more complex picture of the administration of public health in nineteenth century emerges than that apparent in previous historical accounts. While commitment to the Act was certainly rather limited in some respects, such as the funding from the Provincial Council, and the attitudes from some Local Boards of Health, in many respects there was strong enthusiasm for the new legislation. The Central Board was effective and active, addressing a wide range of public health matters and maintaining keen awareness of the reality of health conditions in Auckland. Some Local Boards did take their new responsibilities seriously, regularly reporting to the Central Board of Health, and even on occasion anticipating future problems and highlighting the limitations of the Act. Problems such as lack of funding and lack of knowledge of the Act hampered this will to act on many occasions. While Local Boards of Health were often unable to achieve significant results, this was frequently a result of an inability to translate a desire to act into effective practical action. Thus while health conditions and levels of disease did not drastically worsen, and sometimes even improved, this is hard to attribute to the efforts of public health authorities, although actions such as removing or abating nuisances and isolating cases of infectious disease would undoubtedly have had some positive effect. Changing levels of disease were rather more likely a stimulus to act, rather than a result of public health efforts. Real improvement in public health conditions did not occur until the following century, but one key ingredient for successful public health reform, a genuine desire to achieve practical results, was already in place in the 1870s.

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63 Robert M. Houston to Central Board of Health, 6 March 1873, AP, 10/2, ANZW.

64 F.H. Heighway, No. 2 Report, 31 July 1874, AP, 10/2, ANZW.

Conclusion

The Public Health Act of 1872 was the first comprehensive piece of legislation of its type in the country, and it instituted a new era in public health in New Zealand. The Act was a result of both an immediate crisis, the outbreak of smallpox, and beliefs about public health at the time. Prior to the Act, legislation existed covering quarantine and vaccination, but this was the first time they were covered by the same piece of legislation, and the Act also marked the introduction of the system of Health Boards to New Zealand. The Act constituted a 'new politics of health', which had been developing in Europe, focused around increased state intervention into matters previously regarded as private. Behind this was the 'sanitary idea', based on the miasmatic theory of disease, and centred around the concept of sanitary regulation, including the use of health boards. This reflected a shift in power to define disease and healthy conditions away from individuals into the hands of medical authorities. The 1872 Public Health Act was the first definitive expression of these ideas in New Zealand legislation.

In Auckland City and its suburbs during this period that has been studied, sanitary conditions were sometimes good, and levels of some infectious diseases low, and on occasion there was even a perceived improvement. However, while this is difficult to credit to the efforts of the sanitary authorities, it is not necessarily evidence of neglect of duty. Tangible results are not the only way to measure commitment. It is also necessary to account for the fragmentary knowledge of disease causation and dissemination at the time of the Act. The miasmatic theory was being challenged but was still foremost in the minds of those administering the Act, which limited the effectiveness of public health measures. That what sanitary efforts there were concentrated upon Auckland and its suburbs suggests that public health at the time was conceived of as an urban problem. This indeed was the prevailing belief in New Zealand at the time, as it was in Britain and Europe, and many of the public health problems that occurred were resulted from the concentration of population in a relatively small area and the inability for urban infrastructure such as sewage and water supply to keep up with urban growth.

Public health was conceived of in a wide variety of ways during this period, and there was certainly no consensus of opinion about it. The range of discourses about public health help to understand the motivations and beliefs behind efforts to improve sanitary conditions, as well as resistance to reform. Beliefs such as the promotion of increased 'civilisation', of which public health reform was a part, and the linkage of public health to religion and morality, illustrate that public health reform was widely seen as vital for New Zealand to prosper. These discourses help us to understand what legislation such as the 1872 Public Health Act aimed to achieve, since the social aims of public health legislation have changed over time, and our own understandings of the meaning of public health do not necessarily enlighten a discussion of the movement in the 1870s. The tension evident in some

public discourses in the nineteenth century also explains the variety of reactions to the increasingly interventionist public health policy. The concept of *laissez-faire* was widely debated, and while some saw the administration of the Public Health Act as an invasion of individual liberties, others embraced the idea that it was working towards a greater 'public good'.

Previous historical accounts portray public health administration in the nineteenth century as haphazard and lacking in commitment, including the 1872 Act. A closer investigation of the Act's implementation in the Auckland Province reveals that there is much more to be said. One of the concepts which can be rethought is the nature of what constituted commitment to the Act. In the case of the 1872 Act in Auckland Province, many Local Boards of Health desired to act effectively to improve public health conditions. They were hampered by a range of factors, including lack of funding and sometimes a limited knowledge of the Act. The Local Boards of Health were not the whole story, however, since the Act set up a range of administrative bodies and offices, with varying levels of power and responsibility. These reflected the 'new politics of health', and showed a range of levels of commitment. While the Provincial Council provided limited monetary support for the Act, the Central Board of Health was highly active in promoting sanitary improvements, the Health Inspectors, especially F.H. Heighway, were active and regularly reported to their superiors in the Central Board of Health, and some private individuals and businesses did begin to respond to their new responsibilities, even though their power to define their own sanitary situation was reduced.

Thus the perspectives of previous historians do not provide a fully nuanced picture of public health administration under the 1872 Act. Previous studies have not fully explored the complexity of administration under the Act, at least in the case of Auckland Province. The findings of this dissertation suggest new avenues of research in the field of New Zealand's public health history. The implementation of the Act in other provinces could be investigated in detail, to discover if similar trends are present. As well as this, other centres of population within Auckland Province such as Thames could be further studied. The other two sections of the Act, on quarantine and vaccination, could be investigated in terms of their place in the development of the 'new politics of health' in New Zealand. The effect of the end of provincial government, and the subsequent transition to the 1876 Public Health Act which had more centralised control, could be examined for evidence of the impact the change had on existing public health administrative structures in the various former provinces. Statistics of deaths from different diseases, addressed to a small extent in this dissertation, could be the focus of much more in-depth research, examining change over a longer period and taking into account more detail about age structures. Also worthy of further investigation is the fact that discourse about public health at this time seemed to focus primarily on urban dwellers, Pakeha and adults, since they were presumed to be the carriers of civilisation and

progress.

In 1872, New Zealand made its first attempt to provide a comprehensive legislative framework for the management of public health. Like most such first attempts, it was problematic and did not effectively address all it tried to cover. But the fact that these problems were brought to light by the activities of those who were charged with the Act's implementation was significant. It suggests that lack of practical results can be attributed to a large extent to difficulties of the Act itself, not a lack of commitment from those who tried to make work in the best interests of the people of Auckland Province. They may not have been properly 'armed with power for preventing the spread of infectious disease', but their efforts were important to New Zealand's public health history and should not be dismissed.

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